

## ORIGINAL INVESTIGATION

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**Psychotropic drug intake in residents newly admitted to nursing homes**

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**Abstract** While several surveys have shown that psychotropic drugs are frequently used by nursing home residents, no studies have been performed to investigate whether the rates of drug use increase during the stay in nursing homes or whether residents have taken these drugs already before admission. Therefore, we investigated 262 residents admitted to rural and urban nursing homes in Austria for prevalence of psychotropic drug intake before admission, shortly after admission, and 6 months later. Two weeks after admission, 72.1% of the residents were being treated with psychotropics, while 6 months later 79.0% were receiving these drugs. The significantly higher rates of psychotropic drug use among the psychiatrically ill and in those suffering from sleeping problems suggest that these drugs were prescribed aptly, but residents without appropriate criteria for drug intake were often also treated with psychotropics. During 3 months before admission to nursing homes, 45.5% of the sample reported having taken psychotropics. In more than half of residents without drug intake before admission, psychotropic treatment was initiated within the first 2 weeks after admission, while during the first 6 months after admission the rate of drug use increased only slightly. This suggests that a large percentage of psychotropic intake is due to nursing home orders.

**Key words** Nursing home · Psychotropic drugs · Prevalence · Psychiatric morbidity

**Introduction**

A large number of studies have shown that psychotropic drugs are frequently used by nursing home residents (e.g. Kalchthaler et al. 1977; Segal et al. 1979; Ray et al. 1980; Clarke et al. 1981; Beers et al. 1988; Buck 1988; Burns et al. 1988; Beardsly et al. 1989). The rates of psychotropic drug intake reported from these studies lie between 32% (Burns et al. 1988) and 86% (Segal et al. 1979). Of the different types of psychotropic drugs, most studies indicated that neuroleptics or hypnotics were used most frequently, while the use of antidepressants and anxiolytics was less common. These rates are much higher than those reported from surveys in the general population. Although rates of psychotropic intake in the community are already higher among the elderly [e.g. Pakesch et al. 1989 (13.7%); Fichter 1990 (19.3%)], they are markedly higher again in nursing homes.

Several authors have discussed the reasons for the high rate of psychotropic drug intake in nursing homes. However, as far as we are aware, no studies have been performed to investigate whether the rates of drug use increase during the stay in nursing homes or whether residents admitted to these homes have taken these drugs already before admission.

Surveys in the general population and in nursing homes (e.g. Morgan and Gilleard 1981; Gilleard et al. 1984; Pakesch et al. 1989; Fichter 1990) have reported that the prevalence of psychotropic drug intake varies according to sample characteristics (e.g. is more frequent in those suffering from sleeping problems, and those referred from hospitals).

Most surveys reporting such high rates of psychotropic drug intake in nursing homes used a point-prevalence design regardless of how long the residents had been in the nursing home. Only some researchers have investigated residents at the time shortly after admission to nursing homes [Gilleard et al. 1984 (35.9% for hypnotics); Rovner et al. 1990 (30% for

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neuroleptics)]. As far as we are aware, there are no studies available which have compared the rates of psychotropic drug intake before admission, shortly after admission, and some time later.

The present study is part of a larger survey on the course of psychiatric disorders in nursing homes, and on the treatment of the residents. The main purposes of this study were: (1) to investigate the prevalence of psychotropic drugs used before admission to nursing homes, and in nursing homes both shortly after admission and 6 months later; (2) to investigate the relationship between drug intake and sample characteristics including psychiatric illness and sleeping disorders in nursing homes.

## Materials and methods

### Subjects

The survey was performed in seven nursing homes of two small rural districts in the province of Tyrol, and in three in Vienna, Austria. The rural catchment area consisted of two districts with 139 000 inhabitants; the urban catchment area comprised the City of Vienna and had about 1.5 million inhabitants on the basis of 1991 census estimates (Amt der Tiroler Landesregierung 1991; Magistrat der Stadt Wien 1992).

In the province of Tyrol, our survey was performed in all seven nursing homes of two rural districts. In the City of Vienna, a central agency distributes all elderly persons who need institutional care to the available nursing home beds, not regarding any psychiatric disturbances. Based on the assumption that this procedure ensures sufficient representativity, three homes in Vienna were chosen on the basis of their willingness to participate in the survey. These homes in Vienna had a total capacity of 690 beds, as compared to 183 beds for the seven nursing homes in Tyrol. None of the homes had a consulting psychiatric for attending residents with psychiatric disorders.

It was intended to include roughly equal numbers (130 consecutive admissions) in each of the two catchment areas. Residents entered the study between May 1991 and August 1992. All subjects were investigated twice for psychotropic drug intake, psychiatric illness, and sleeping problems: within 2 weeks after admission to the nursing home [time 1 (T1)] and six months ( $\pm 2$  weeks) later [time 2 (T2)]. Of all residents who were admitted during this time, 0.7% were too ill to be questioned (according to the head of the nursing home), and 1.7% refused to participate in our survey. A further 6.3% dropped out because of other reasons (e.g. referral to a hospital or death shortly after admission). These "sample missings" were replaced by the next admitted residents. Thus, of a total of 287 admissions, our sample consisted of 262 persons (91.3%).

In 77 persons in the sample investigated at T1 ( $n = 262$ ), we could not get reliable information about intake of psychotropics during 3 months before admission to nursing homes. Thus, the sample for investigation of drug intake before admission consisted of only 185 persons.

### Methods

We obtained data on the use of psychotropics during the residents' stay in the nursing homes from treatment sheets. "As required" prescriptions (= p.r.n.) were signed for by nurses when dispensed, so it was possible to document all psychotropic drugs that were

actually distributed. Drugs taken within 1 week around T1 or T2 (i.e. the day of the interview, 3 days before and 3 days after the interview) were included for analysis. Psychotropic drugs were categorized into six drug classes [ATC codes (WHO 1996) in brackets]: neuroleptics (NO5A), antidepressants (NO6A, including combinations: NO6CA), anxiolytics (NO5B, predominantly benzodiazepine derivatives and meprobamate), hypnotics (NO5C, predominantly benzodiazepine derivatives), antiepileptics (NO3A), and others (e.g. nootropics). If a resident was prescribed more than one drug in a given group, this was counted only once.

Age, gender, marital status, and source of admission (i.e. private household, psychiatric or general hospital) were obtained from the case notes. Additionally, research psychiatrists asked the residents about the duration of their somatic illness, and about intake of psychotropics during the 3 months before admission (i.e. every intake at any time during these 3 months, including p.r.n. prescription). For residents suffering from severe cognitive impairment, we asked nurses, physicians and, if available, relatives for these data.

Residents who had taken psychotropics at any time during the 3 months before admission and who were receiving them at T1 were deemed to have "continued" the medication, not to have "started" it. Those who had taken psychotropics during the 3 months before admission but were not receiving them at T1, were deemed to have "stopped" the medication.

Psychiatric case identification was carried out by means of the Clinical Interview Schedule (= CIS; Goldberg et al. 1970) in a modification for use with old people (Cooper and Schwarz 1982). This semi-structured interview was developed to study psychiatric morbidity in non-psychiatric settings. It includes a section with a list of 11 "reported symptoms" (including sleeping problems) and a section with 12 "clinical abnormalities" observed at interview. For the analysis of sleeping problems we used a cut-off of 1/2 according to the CIS (Goldberg et al. 1970): 1 = "mild" (minimal degree or habitual trait not causing significant distress), 2 = "moderate" (occasionally present to a pathological degree or occasionally having caused significant distress).

For diagnosis, the ninth revision of the International Classification of Diseases (ICD-9; WHO 1978) was used. A psychiatric "case" was defined by two criteria, as proposed by Fichter (1990); presence of an ICD diagnosis and presence of an overall clinical severity of at least 2 on a 5-point rating. The interviews were carried out by three research psychiatrists who had been trained in the use of the interview [interrater reliability 0.79-1.00 (weighted kappa)]. Physicians who prescribed psychotropic drugs were unaware of the results of the research psychiatrists. Interviewees and their relatives were assured that any information obtained would be treated as confidential.

### Statistics

Data were analysed using the Statistical Package for the Social Sciences. In order to identify predictors for intake of psychotropics at T1 and at T2, logistic regression analyses (stepwise forward procedure) were performed with "psychotropic drug use" as dependent variable. The independent variables included age, gender, marital status, duration of the somatic illness before admission to the nursing home, psychiatric caseness at the time of investigations (T1, T2), sleeping problems at the time of investigations (T1, T2), and source of admission (referral from any hospital versus admission from private households). For these calculations, nominal variables (e.g. marital status) were recoded by SPSS to a number of dichotomies. (Because of the high frequency of missing data regarding "intake of psychotropics before admission", we excluded this variable from these statistical analyses.)

## Results

### Sample characteristics

Of 262 admissions participating in our survey at T1, 132 were from nursing homes of the rural catchment area, and 130 from urban ones. Residents were predominantly female and above 80 years old (Table 1). The majority were widowed, and had suffered for more than 1 year from somatic disorders. Sixty-six percent admitted from their private households, and 31.3% were referred from non-psychiatric departments of general hospitals. Only 2.7% had been psychiatric inpatients before admission to nursing homes.

Psychiatric prevalence according to case criteria of CIS was 76.3% at T1. The most common diagnoses were dementia and other organic mental disorders (64.9%), followed by neurotic, adjustment, and psychosomatic disorders (16.8%; for more details, see Wancata et al. 1997). Irrespective of psychiatric case criteria, 79.8% of the residents suffered from sleeping problems during the preceding 2 weeks.

After 6 months, only 191 residents (72.9% of the T1 sample) were still living in the nursing homes. 50 residents (19.1%) had died during this period, and 21 (8.0%) had either been discharged to their private households or had been admitted to hospital. Of the residents present at T2, five persons (2.6%) refused to participate in this study. Thus, the T2 sample consisted of 186 persons.

At T2, sample composition according to sociodemographic and health characteristics was similar to that the T1 (Table 1). Among those residents who participated at both times, psychiatric prevalence was slightly lower at T2 (69.9%) than at T1 (72.6%). This means the rate of remission from psychiatric illness (predominantly from adjustment and psychosomatic disorders) was slightly higher than incidence.

### Psychotropic drug use before admission as compared to T1 data

Of the 185 persons mentioned above, 84 residents (45.4%) had used such drugs during 3 months before admission (Table 2). All but four (2.2%) of them were receiving psychotropics at T1. Of the 101 residents who had not taken psychotropics during the 3 months before admission, 57 (30.8% of the 185) had started psychotropic treatment by T1. Thus at T1, 74.0% of the 185 were taking psychotropics. Looking at the individual psychotropic classes, the proportion of use of neuroleptics, antidepressants, and anxiolytics had by T1 in each case roughly doubled compared with the 3 months before admission.

**Table 1** Sociodemographic and health characteristics of the sample at T1 and at T2

		T1 <i>n</i> = 262	T2 <i>n</i> = 186
<i>Gender</i>			
Female	(%) (CI)	75.2 (70.0–80.4)	75.3 (69.1–81.5)
Male	(%) (CI)	24.8 (19.6–30.0)	24.7 (18.5–30.9)
<i>Age groups</i>			
≤ 60 years	(%) (CI)	5.0 (2.4–7.6)	5.9 (2.5–9.3)
61–70 years	(%) (CI)	6.1 (3.2–9.0)	8.1 (4.2–12.0)
71–80 years	(%) (CI)	28.2 (22.8–33.6)	28.0 (21.6–34.4)
81–90 years	(%) (CI)	49.6 (43.5–55.7)	47.3 (40.1–54.4)
> 90 years	(%) (CI)	11.1 (7.3–14.9)	10.8 (6.3–15.3)
<i>Marital status</i>			
Single	(%) (CI)	19.1 (14.4–23.8)	22.6 (16.6–28.6)
Married	(%) (CI)	13.8 (9.6–18.0)	11.3 (6.8–15.8)
Divorced	(%) (CI)	5.7 (2.9–8.5)	3.9 (1.1–6.7)
Widowed	(%) (CI)	61.4 (55.5–67.3)	62.1 (55.1–69.1)
<i>Source of admission</i>			
Private household	(%) (CI)	66.0 (60.3–71.7)	62.4 (55.4–69.4)
Psychiatric hospital	(%) (CI)	2.7 (0.7–4.7)	2.7 (0.4–5.0)
General hospital	(%) (CI)	31.3 (25.7–36.9)	34.9 (28.1–41.7)
<i>Duration of somatic illness</i>			
< 1 year	(%) (CI)	3.6 (1.4–5.8)	2.2 (0.1–4.3)
≥ 1 year	(%) (CI)	96.4 (94.2–98.6)	97.8 (95.7–99.9)
<i>Sleeping problems</i>			
Yes	(%) (CI)	79.8 (74.9–84.7)	85.5 (80.4–90.6)
<i>Psychiatric cases</i>			
Yes	(%) (CI)	76.3 (71.2–81.4)	69.9 (63.3–76.5)

### Prevalence of psychotropic drug use at T1

At T1, 72.1% of the total sample (*n* = 262) were receiving psychotropics (range 40.0–92.3%, depending on the nursing home). Drug intake was similar in female and in male residents (Table 3). Not surprisingly, all residents referred from psychiatric hospitals received psychotropic drugs, while this rate was lower among admissions from private households (68.8%), and among referrals from general hospitals (76.8%). Residents suffering from psychiatric disorders or from sleeping problems showed markedly higher rates of psychotropic drug use shortly after admission.

In the T1 sample, intake of specific psychotropic drug types was highest for neuroleptics, followed by

**Table 2** Intake of specific psychotropic drugs (%) 3 months before admission, and start or stop of these drugs at admission (for residents for whom reliable data concerning previous psychotropic drug intake could be gathered;  $n = 185$ )

	Intake before admission (CI)	Start of intake by T1 (CI)	Stop of intake by T1 (CI)
All psychotropics	45.4 (38.3–52.5)	30.8 (24.2–37.4)	2.2 (0.1–4.3)
Neuroleptics	13.0 (8.2–17.8)	15.7 (10.5–20.9)	0.0 (0.0)
Antidepressants	9.2 (5.0–13.4)	14.1 (9.1–19.1)	0.5 (0.0–1.5)
Anxiolytics	15.7 (10.5–20.9)	15.7 (10.5–20.9)	2.2 (0.1–4.3)
Hypnotics	20.0 (14.3–25.7)	8.6 (4.6–12.6)	5.4 (2.2–8.6)
Antiepileptics	2.7 (0.4–5.0)	0.0 (0.0)	0.0 (0.0)
Others	4.9 (1.8–8.0)	4.3 (1.4–7.2)	2.2 (0.1–4.3)

anxiolytics, hypnotics, and antidepressants. A much lower number of residents received “other psychotropics”, which included predominantly nootropics and drugs of herbal origin (Table 4). Psychiatric cases most often took neuroleptics and anxiolytics, while non-cases most often used anxiolytics and hypnotics. Only the intake of neuroleptics was markedly higher among the mentally ill than among the mentally well.

Using logistic regression analysis, psychiatric caseness ( $B = 0.75$ ,  $P = 0.0001$ ), and sleeping problems ( $B = 1.48$ ,  $P = 0.0000$ ) turned out as being predictors of psychotropic drug use at T1 (goodness of fit: chi-square = 236.5,  $df = 235$ ,  $P = 0.46$ ; predictive value: 81.5%).

#### Comparison of psychotropic drug use at T1 and at T2

Among the residents participating in the survey at both times ( $n = 186$ ), prevalence of psychotropic drug intake was only slightly higher at T2 (79.0%) than at T1 (Table 5). A total of 9.7% who did not receive any psychotropics shortly after admission were being treated with such drugs 6 months later. In 5.9% who used psychotropics at T1, no psychotropic intake was found at T2. For all specific types of psychotropics, the rates of drug intake initiated between T1 and T2 were similar to those stopped during this time.

#### Prevalence of psychotropic drug use at T2

Six months after admission, 79.0% of the residents were being treated with psychotropic drugs (range 60.0–90.9%, depending on the nursing home). According to all sample characteristics, distribution of

**Table 3** Prevalence of psychotropic drug intake (%) according to sociodemographic and health characteristics of the sample at T1 ( $n=262$ ) and at T2 ( $n=186$ )

	Intake at T1 (CI)	Intake at T2 (CI)
Total sample	72.1 (66.7–77.5)	79.0 (73.2–84.8)
<i>Gender</i>		
Female	71.6 (65.3–77.9)	78.6 (71.8–85.4)
Male	73.8 (63.1–84.5)	80.4 (68.9–91.9)
<i>Age groups</i>		
≤ 60 years	69.2 (44.2–94.2)	72.7 (46.4–99.0)
61–70 years	75.0 (53.8–96.2)	73.3 (51.0–95.6)
71–80 years	68.9 (58.4–79.4)	78.8 (67.7–89.9)
81–90 years	76.9 (69.7–84.1)	79.5 (71.1–87.9)
> 90 years	58.6 (40.7–76.5)	85.0 (69.4–100.0)
<i>Marital status</i>		
Single	66.0 (52.5–79.5)	72.5 (58.7–86.3)
Married	79.4 (65.8–93.0)	95.0 (85.5–100.0)
Divorced	78.6 (57.1–100.0)	100.0 (100.0)
Widowed	71.5 (64.3–78.7)	77.3 (69.5–85.1)
<i>Source of admission</i>		
Private household	68.8 (61.9–75.7)	75.9 (68.1–83.7)
Psychiatric hospital	100.0 (100.0)	100.0 (100.0)
General hospital	76.8 (67.7–85.9)	83.1 (74.0–92.2)
<i>Duration of somatic illness</i>		
< 1 year	55.6 (23.1–88.1)	75.0 (32.6–100.0)
≥ 1 year	72.1 (66.5–77.7)	79.0 (73.0–85.0)
<i>Sleeping problems</i>		
No	28.3 (16.2–40.4)	40.7 (22.2–59.2)
Yes	83.3 (78.3–88.3)	85.5 (80.0–91.0)
<i>Psychiatric cases</i>		
No	53.2 (40.8–65.6)	66.1 (53.7–78.5)
Yes	78.0 (72.3–83.7)	84.6 (78.4–90.8)

drug intake showed similar trends to the intake at T1 (Table 3).

In the T2 sample, the proportion of drug use for the specific types of psychotropics showed the same ranking as at T1. As at T1, only neuroleptics were taken markedly more often by psychiatric cases than by non-cases (Table 4).

Again, only sleeping problems ( $B = 1.05$ ,  $P = 0.000$ ) and psychiatric caseness ( $B = 0.54$ ,  $P = 0.0105$ ) showed a statistically significant association with psychotropic

**Table 4** Use of specific psychotropic drugs (%) at T1 and T2 according to psychiatric caseness

	Intake at T1 (CI)			Intake at T2 (CI)		
	Total (n = 262)	Psychiatric non-cases (n = 62)	Psychiatric cases (n = 200)	Total (n = 186)	Psychiatric non-cases (n = 56)	Psychiatric cases (n = 130)
All psychotropics	72.1 (66.7–77.5)	53.2 (40.8–65.6)	78.0 (72.3–83.7)	79.0 (73.2–84.8)	66.1 (53.7–78.5)	84.6 (78.4–90.8)
Neuroleptics	32.1 (26.4–37.8)	6.5 (0.4–12.6)	40.0 (33.2–46.8)	31.2 (24.6–37.8)	7.1 (0.4–13.8)	41.5 (33.1–48.9)
Antidepressants	21.0 (16.1–25.9)	14.5 (5.7–23.3)	23.0 (17.2–28.8)	21.5 (15.6–27.4)	23.2 (12.2–34.2)	20.8 (13.8–27.8)
Anxiolytics	26.3 (21.0–31.6)	22.6 (12.2–33.0)	27.5 (21.3–33.7)	30.6 (24.0–37.2)	28.6 (17.2–40.4)	31.5 (23.5–39.5)
Hypnotics	22.1 (17.1–27.1)	19.4 (9.6–29.2)	23.0 (17.2–28.8)	28.5 (22.0–35.0)	30.4 (18.4–42.4)	27.7 (20.0–35.4)
Antiepileptics	1.9 (0.3–3.5)	1.6 (0.0–4.7)	2.0 (0.1–3.9)	3.2 (0.7–5.7)	1.8 (0.0–5.3)	3.8 (0.5–7.1)
Others	5.0 (2.4–7.6)	6.5 (0.4–12.6)	4.5 (1.6–7.4)	8.6 (4.6–12.6)	8.9 (1.4–16.4)	8.5 (3.7–13.3)

**Table 5** Start and stop of specific psychotropic drugs (%) during 6 months after admission to nursing homes (for residents participating at both times: n = 186)

	Start between T1 and T2 (CI)	Stop between T1 and T2 (CI)	Intake at T2 (CI)
All psychotropics	9.7 (5.5–13.9)	5.9 (2.5–9.3)	79.0 (73.2–84.8)
Neuroleptics	9.1 (5.0–13.2)	7.5 (3.7–11.3)	31.2 (24.6–37.8)
Antidepressants	5.9 (2.5–9.3)	7.5 (3.7–11.3)	21.5 (15.6–27.4)
Anxiolytics	12.4 (7.7–17.1)	10.2 (5.9–14.5)	30.6 (24.0–37.2)
Hypnotics	12.4 (7.7–17.1)	7.5 (3.7–11.3)	28.5 (22.0–35.0)
Antiepileptics	0.5 (0.0–1.5)	0.0 (0.0)	3.2 (0.7–5.7)
Others	5.9 (2.5–9.3)	2.7 (0.4–5.0)	8.6 (4.6–12.6)

drug use in logistic regression analysis (goodness of fit: chi-square = 173.5, *df* = 168, *P* = 0.37; predictive value: 82.5%).

## Discussion

Our survey shows that psychotropic drugs are frequently used at the time shortly after admission to nursing homes and 6 months later. The rates of drug intake (72.1%, 79.0%) are in the higher range of those studies known to us. Both shortly after admission and 6 months later, neuroleptics are the most frequently taken drug classes, which is in accordance with the data of authors using a point-prevalence design (e.g. Mann

et al. 1984, 1986; Burns et al. 1988; Beardsly et al. 1989). To our knowledge, no authors investigating psychotropic drug intake shortly after admission have compared different types of psychotropics.

At T1 and at T2, psychiatric caseness and sleeping problems were significantly associated with psychotropic use, while sociodemographic characteristics and referral from hospital to nursing home did not show such an association, when controlling for the other independent variables. This is in contrast to the findings of Morgan and Gilleard (1981), and of Gilleard et al. (1984) investigating the intake of hypnotics, but these authors did not include psychiatric morbidity in their analyses.

During 3 months before admission to nursing homes, 45.4% of the residents for whom these data could be gathered had taken psychotropic drugs. This number is markedly higher than the rates reported from surveys in the elderly living in their private households [Fichter 1990 (19.3%); Pakesch et al. 1989 (13.7%)]. (Because of the high rate of missing data concerning this question, we did not perform a logistic regression analysis to identify predictors.)

The rate of psychotropic drug use increased only slightly during the first 6 months after admission, while in more than half of the residents who reported having taken no psychotropics during 3 months before admission, such treatment was initiated during the first 2 weeks after admission. This suggests that a large percentage of psychotropic intake is due to nursing home orders.

Despite all attempts to gather data about previous intake of psychotropics (i.e. interviews with nurses, physicians and relatives in residents with severe cognitive impairment), we could not get reliable information about this for 30% of the sample. This part of the sample consisted predominantly of residents who suffered

from organic mental illness. In addition, as information about previous intake was obtained retrospectively, it must be taken into consideration that some of the residents might have forgotten to report pre-admission drug use. Thus, we cannot exclude the possibility that more residents had taken psychotropics before being admitted to nursing homes. In this case, the increase in intake of psychotropics shortly after admission may not be as marked as our data suggest. Thus, we believe that epidemiological surveys of the elderly living in the community, and follow-up surveys after admission to nursing homes would be necessary to get more reliable information about psychotropic drug intake before and after admission to nursing homes.

The significantly higher rates of psychotropic drug use among the psychiatrically ill and in those suffering from sleeping disorders suggest that these drugs were prescribed appropriately. On the other hand, most of the residents who had taken psychotropics before admission also received the same drugs shortly after admission to nursing homes. While this may indicate that psychotropics are used appropriately in residents with psychiatric comorbidity, it could also reflect a degree of uncertainty among resident doctors prescribing the medications.

Surprisingly, at both times of investigation, residents not suffering from sleeping problems or psychiatric illness, i.e. without appropriate criteria for drug intake, were often treated with psychotropics. In view of the capacity of psychotropics to produce adverse reactions and considering the costs of such treatment, the reasons for drug use in these residents will have to be investigated in further surveys.

The high rate of psychiatric morbidity on the one hand, and of treatment with psychotropics on the other, underlines the enormous importance of adequate psychiatric training for nursing home physicians. Additionally, these facts indicate that nursing homes should have consulting psychiatrists for residents with psychiatric disorders.

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