

# Elderly alcoholics in outpatient treatment

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## ABSTRACT

**INTRODUCTION:** In Denmark, the treatment of alcoholics is provided by public outpatient alcohol clinics. The purpose of this study was to investigate whether elderly patients differ from younger patients with regards to socio-demographic data, drinking pattern and psychiatric comorbidity which may affect the organization of the treatment.

**MATERIAL AND METHODS:** The study covered 2,530 patients, who started psychosocial treatment at alcohol treatment outpatient clinics. Prior to the treatment, a therapist interviewed the patients using the Addiction Severity Index (ASI). ASI offers a multidimensional picture of the patients' problems within the month leading up to the interview. Seven problem areas in the patients' life are described: 1) Medicine, 2) Employment, 3) Alcohol 4) Drugs, 5) Legal status, 6) Family and social circumstances and 7) Psychiatric health.

**RESULTS:** Among the 2,530 patients, 220 (8.7%) were elderly ( $\geq 60$  years). The ASI scores showed that the elderly patients has significantly fewer problems than the younger patients in the following areas: employment, drugs, family/social circumstances and psychiatric health.

**CONCLUSION:** Elderly alcoholics in the public alcohol outpatient clinics differ from younger patients on a range of variables. Such differences may affect the organization of the treatment, which may not need to be as intensive as previously assumed.

In the past decade there has been an increase in alcohol consumption among middle-aged and elderly Danes. The National Institute of Public Health has reported that the daily consumption of alcohol among men above the age of 50 years has increased from 1.5 to 2.1 drinks of alcohol in the 1987-2003 period. Among women in the same age group, consumption has doubled from 0.5 to one drink [1]. In Denmark, one drink is the equivalent of 12 g of alcohol.

In the coming decades the number of elderly Danes who retire will rise because of the "baby boom" generation from the 1950s and 1960s. This cohort of elderly adults, who are more comfortable with alcohol use, is significantly larger than any previous cohort. Because of these two characteristics, expectations are that the number of elderly Danes with alcohol problems will rise considerably in the coming years [1].

The elderly population has an increased vulnerabil-

ity towards alcohol. An elderly person's body consists of proportionately more fat and less water, and as alcohol is water-soluble, one unit of alcohol will cause a comparatively high blood alcohol level in elderly people [2]. Furthermore, elderly people often receive medical treatment that may interact with alcohol, and they develop alcohol-related symptoms more frequently than the rest of the population, especially anxiety and depression, and are prone to increased morbidity in connection with hazardous drinking [3]. In Denmark, the upper threshold for hazardous drinking is 21 drinks per week for men and 14 drinks per week for women [4]. Although hazardous drinking is a major public health problem and presents an increased risk to the elderly person, little attention has been directed towards treatment adapted to elderly persons who abuse alcohol.

In Denmark, the treatment offered to patients who abuse alcohol is almost entirely provided by public outpatient alcohol clinics. Such treatment is free of charge and accessible for all Danes. In the private sector, inpatient treatment offers are few. Some of the offers are designed according to the Minnesota model. More than 95% of all patients are treated in the public sector.

Data from the participating public outpatient alcohol clinics covering the first six months of 2008 show that patients aged 60 years and above now represent 14% of all patients. This represents a doubling since 2003.

The aim of this retrospective, naturalistic study is to investigate how outpatient alcoholics aged 60 years and above (elderly alcoholics) differ from middle-aged (40 to 59 years of age) and younger (15 to 39 years of age) adults with regard to socio-demographic data, drinking pattern and psychiatric data. Such differences may be of importance when planning the future treatment of elderly alcoholics.

## MATERIAL AND METHODS

### Study setting

The present study comprises three clinics situated in Odense, Assens and Svendborg, covering a region counting approximately 450,000 inhabitants. The outpatient alcohol clinics only treat patients whose main problems are alcohol-related. Abuser of illegal drugs are treated in special clinics, but patients with minor abuse of cannabis or benzodiazepines are treated at the clinics comprised

## ORIGINAL ARTICLE

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by this study. Patients with a current psychotic disorder and concurrent abuse are treated elsewhere.

At the three clinics, treatment is provided by an interdisciplinary team of psychiatrists, nurses and social workers. If needed, the patients are initially detoxified. Subsequently, a screening interview is performed by the clinical staff using the Addiction Severity Index (ASI) [5]. On the basis of this interview, the psychiatrist refers the patient to one of the clinic's treatment modules. The treatments offered include family therapy, cognitive behavioural therapy and supportive consultations.

### Study participants

The patients were enrolled in the study if they fulfilled the criteria of the 10th International Classification of Diseases for harmful use of alcohol (F10.1) or dependence (F10.2) and were  $\geq 15$  years of age, Danish speaking, non-psychotic, free of severe brain injury, terminal disease and treatment relating to forensic psychiatry. Patients were enrolled consecutively. The study included 2,530 outpatients who started psychosocial treatment at the alcohol outpatient clinics in the years 2003-2007.

### Procedure and variables

At baseline, all patients were assessed by means of the ASI. The ASI is a semi-structured interview which provides a multidimensional image of the patient's situation within the month leading up to the interview. The interviews were conducted by nurses and social workers, explore seven areas of the patient's life: medicine, employment, alcohol, drugs, legal status, family/social network and psychiatric health. The ASI uses composite scores.

ASI composite scores are generic scores reflecting the level of problems in each of the seven areas. A score is calculated by weighing questions on prevalence, intensity and duration of symptoms within the 30 days preceding the interview. Scores fall between zero and one, where zero denotes no problems and one denotes severe problems in the specific area. A more specific explanation of the various variables is given in the manual [6]. To ensure data quality, the therapists attended courses on ASI. To guarantee interviewing stability, the same therapists performed the test interviews throughout the project period.

### Statistical methods

Unpaired Student's t-test was used for comparison of various mean values of groups; analysis of variance with Bonferroni correction was used where several mean values were compared. For categorical variables, we used the  $\chi^2$  test.  $p < 0.05$  was chosen as significance level.

### RESULTS

Among the 2,530 patients, 220 (8.7%) were 60 years or older. **Table 1** shows their socio-demographic characteristics and the referral patterns. There were significantly more females among the older and middle-age alcoholics ( $n = 600$ , 33.3%) than among the younger alcoholics ( $n = 178$ , 24.4%),  $p < 0.001$ .

Although a large part of both young, middle-aged and old alcoholics referred themselves for treatment, significantly more older alcoholics than younger and middle-aged alcoholics sought treatment on the request of their family.

The elderly alcoholics reported that their hazardous drinking started at a significantly older age than the middle-aged and younger alcoholics (**Table 2**). The elderly patients, who were new to the treatment system, had been drinking hazardously for an average of 16.8 years, which was significantly longer than the other two age groups, 14.0 years and 8.4 years respectively.

Among the younger and middle-aged alcoholics, there was a significantly higher proportion with early-onset alcoholism (onset  $\leq 25$  years old) (elderly: 7.7%, middle-aged: 31.2%, young: 67.1%).

The patients' psychiatric problems throughout their lives and during the 30 days leading up to the day the patients contacted the clinics are presented in **Table 3**. Significantly more elderly than middle-aged and young patients had received psychopharmacological drugs. However, the young alcoholics reported a far higher rate of suicide attempts and difficulty controlling violent behaviour. The last months before approaching the clinics, the old and middle-aged received more psychopharmacological drugs than the young alcoholics. However,

**TABLE 1**

Sociodemographic characteristics and referral pattern of treated alcoholics  $\geq 60$  years of age, and treated alcoholics  $< 60$  years.

	$\geq 60$ years (n = 220)	40-59 years (n = 1,580)	15-39 years (n = 730)	p values
Age, years, mean (range)	64.2 (60-78)	48.4 (40-59)	32.6 (15-39)	
Gender, %				
Female	35.5	3.0	24.4	$< 0.001$
Marital status, %				
Married or cohabiting partner	55.5	44.1	38.9	$< 0.001$
Current source of income <sup>a</sup> , %				
Employment	20.9	42.9	42.7	$< 0.001$
Pension	53.6	20.7	6.7	$< 0.001$
Others	25.5	36.4	50.6	$< 0.001$
Referral pattern, %				
Self-referred	33.2	40.4	38.4	0.134
Hospital	17.3	15.2	14.4	0.469
General practitioner	12.7	9.2	9.3	0.262
Family	20.0	9.9	7.8	$< 0.001$
Social services	16.8	25.3	30.1	$< 0.001$

a) The month leading up to admission.

more young alcoholics reported difficulty controlling violent behaviour.

The social problems reported for the month leading up to admission were significantly fewer among the elderly alcoholics than among the two other age groups, **Figure 1**. The elderly alcoholics' psychiatric problems were of the same severity as those of the middle-aged alcoholics, but the middle-aged alcoholics had significantly more severe alcohol problems than the elderly and the young alcoholics. The young group had significantly higher rates of legal problems than the patients of the other groups.

## DISCUSSION

Our results show that elderly patients in public alcohol outpatient treatment clinics differ from the middle-age and younger patients on a wide range of variables. Many of the elderly have a social network (married or cohabiting), which may be one of the explanations why their families often assist the patients in initiating treatment.

The elderly patients in our study had been engaged in hazardous drinking for a much longer time than the remaining patients before the alcohol problem was acknowledged and treatment initiated. The reasons for non-detection of alcohol problems in the elderly are many and varied. Elderly citizens who have alcohol problems often turn to the health care system with co-morbid physical or psychiatric illness, such as falls, confusion and depression, which makes detection of the alcohol problem more difficult [7-9]. Furthermore, the elderly lack knowledge about the risks associated with excessive alcohol consumption [4]. The Danish recommendations for a sensible weekly alcohol intake (< 21 units for men and < 14 units for women) may not apply to the elderly due to their increased sensitivity to the effects of alcohol [2]. For example, the National Institute on Alcohol Abuse and Alcoholism in the US recommends that elderly people consume no more than one drink per day [3].

In our study, elderly alcohol abusers had their hazardous drinking debut after the age of 40 which corresponds to the results reported from other studies [10]. Only very few had their debut before turning 25 years old. The low prevalence of early-onset alcoholics in the group of elderly may be due to the fact that an early debut is associated with premature death. It is well-documented that a lifetime diagnosis of alcoholism is a major risk factor for completed suicide [11].

Another reason could be the cross-sectional nature of our study, and a cohort effect cannot be excluded. The drinking habits of Danes born in the 1950's may differ substantially from the habits of the young generations.

Throughout their life, a very large proportion of the elderly had been treated with psychoactive drugs, de-

**TABLE 2**

Self-reported drinking (from the Addiction Severity Index interview) among treated alcoholics  $\geq 60$  years of age and among treated alcoholics < 60 years.

Variables	$\geq 60$ years (n = 220)	40-59 years (n = 1,580)	15-39 years (n = 730)	p values
<i>Alcohol career</i>				
Alcohol debut age, years, mean	19.6	16.7	15.0	< 0.001
Hazardous drinking debut age <sup>a</sup> , years, mean	45.9	32.1	23.1	< 0.001
Years of hazardous drinking before first treatment, mean <sup>b</sup>	16.8	14.0	8.4	< 0.001
Alcohol dependence, %	84.8	89.8	81.7	
Early onset, <sup>c</sup> %	7.7	31.2	67.1	0.002
New to the treatment system, %	67.5	53.5	65.3	< 0.001
<i>Current drinking pattern<sup>d</sup></i>				
Several days per week, %	85.5	87.5	92.7	< 0.001
Weekends/holidays, %	14.5	12.5	7.3	< 0.021

a) More than 21 drinks per week for men and 14 drinks per week for women. b) Only patients who were new to the treatment system. c) At < 25 years. d) The month leading up to admission.

**TABLE 3**

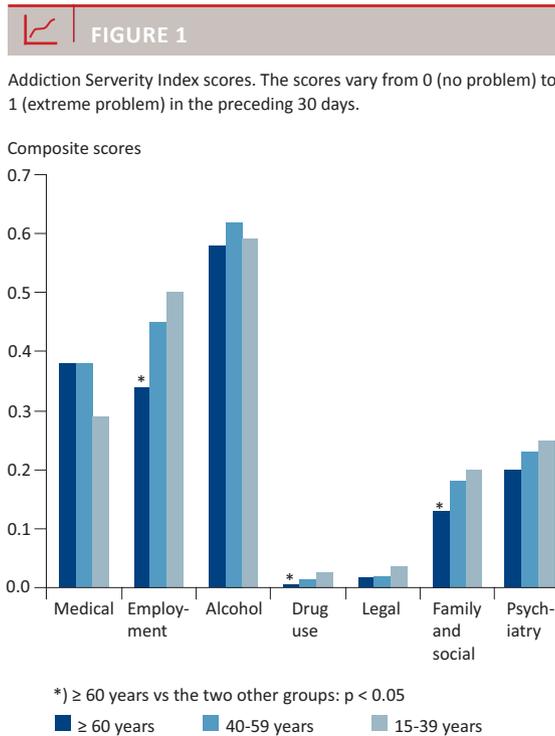
Self-reported psychiatric characteristics (from the Addiction Severity Index interview) – current and lifetime prevalence in %.

Variables	$\geq 60$ years (n = 220)	40-59 years (n = 1,580)	15-39 years (n = 730)	p values
<i>Self-reported lifetime psychiatric characteristics</i>				
Severe depression	49.3	42.5	41.0	0.091
Severe anxiety	32.7	38.5	39.0	0.219
Prescribed medication for psychiatric disorders	70.0	58.7	47.7	< 0.001
Suicidal thoughts	35.9	42.6	47.7	0.006
Suicide attempts	17.1	23.1	28.8	< 0.001
Difficulty controlling violent behaviour	7.4	17.8	35.3	< 0.001
<i>Self-reported current psychiatric characteristics<sup>a</sup></i>				
Prescription drug/medication for psychiatric disorders	42.4	37.7	30.1	< 0.001
Suicidal thoughts	13.4	15.8	13.4	0.165
Suicide attempts	4.1	3.1	4.8	0.106
Difficulty controlling violent behaviour	1.8	4.5	10.5	0.001

a) The month leading up to admission.

spite having the same psychiatric comorbidity as the other patients. The explanation may simply be that elderly patients have a longer risk period for mental illness. It is also known that the elderly frequently consult their general practitioner (GP), which may be why they receive more medicine. All participants were prescribed psychoactive drugs by their own GP before admission to treatment for alcoholism.

The young patients reported a larger incidence of suicidal behaviour and difficulty controlling violent behaviour than the other two groups. The reason for this may be that there are far more early-onset alcoholics among younger patients. According to cloning typologies [12], early-onset alcoholism is characterized by a per-



sonality with antisocial behaviour and no desire to avoid harm.

The number of significant differences in ASI composite scores indicates that elderly alcoholics had less severe problems than the younger and middle-aged alcoholics when they initiated treatment. Thus, the consequences of alcohol abuse among the elderly are not as severe as in middle-age and younger alcoholics. Most of the elderly in our study population were late-onset alcoholics, and they have a greater social network than early-onset alcoholics. These conditions indicate that treatment does not need to be as intensive as that of other age-groups, and that the prognosis for the elderly may be favourable [13, 14].

Consequently, we recommended that age-specific treatment programmes be developed. These should be based on brief interventions and motivational interviewing techniques [15, 16].

With regard to preventive measures, politicians and central authorities have predominantly focused on young citizens' alcohol consumption and on implementation of alcohol policies at the workplace. However, there is a need for preventive measures targeting the increasing population of elderly who have left the workplace. The new generation of old-age pensioners enjoys a strong economic standing and are used to frequent alcohol intake. Both of these characteristics may contribute to an alcohol abuse requiring treatment [17, 18]. Our study shows that the elderly enter treatment at a

later point in time than the two other groups, as they are not discovered by public institutions or the workplace. Their problems will therefore first and foremost be discovered by the health service and the family. Thus, prevention strategies and information must be directed at the elderly themselves, their social networks (spouses and children), and at health professionals.

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**CONFLICTS OF INTEREST:** None

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