

Danish Centre for Evaluation and Health Technology Assessment

## TREATMENT OF ALCOHOL ABUSE

### A health technology assessment - summary

Anette Søgaard Nielsen<sup>1</sup>, Ulrik Becker<sup>1</sup>, Betina Højgaard<sup>2</sup>, Anders Blædel Lassen<sup>2</sup>, Marlene Willemann<sup>3</sup>,  
Jes Søgaard<sup>2</sup>, Morten Grønbæk<sup>1</sup>

1. National Institute of Public Health
2. DSI Danish Institute for Health Services Research
3. DACEHTA, National Board of Health

## Treatment of alcohol dependence – a Health Technology Assessment

© Danish Centre for Evaluation and Health Technology Assessment  
National Board of Health

URL: <http://www.sst.dk>

Key words: alcohol, alcohol treatment, alcohol dependence, alcohol abuse, abstinence treatment, pharmacological treatment, psychosocial treatment, organization, patients perspectives, health economy

Language: Danish, with an english summary

Format Pdf

Version: 1,0

Version date: 15. september 2006

Published by: National Board of Health, Denmark, october 2006

Design: National Board of Health and 1508 A/S

Layout: P.J. Schmidt Grafisk

ISBN (printed version): 87-7676-361-7

ISBN (electronic version): 87-7676-357-9

ISSN (electronic version): 1399-2481

This report should be referred as follows:

National Board of Health, Danish Centre for Evaluation and Health Technology Assessment

Treatment of alcohol dependence – a Health Technology Assessment

Copenhagen: National Board of Health, Danish Centre for Evaluation and Health Technology Assessment, 2006  
Health Technology Assessment 2006; 8(2)

---

**Series Title: Danish Health Technology Assessment**

**Series Editorial Board: Finn Børlum Kristensen, Mogens Hørder, Leiv Bakketeig**

---

For further information please contact:

National Board of Health

Danish Centre for Evaluation and Health Technology Assessment

Islands Brygge 67

DK-2300 Copenhagen

Denmark

Phone: +45 72 22 75 48

E-mail: [dacehta@sst.dk](mailto:dacehta@sst.dk)

Home page: [www.dacehta.dk](http://www.dacehta.dk)

The publication can be down-loaded free of charge at [www.dacehta.dk](http://www.dacehta.dk)

# Summary

## Background

Danish people have a high consumption of alcohol compared to inhabitants in other Nordic and European countries. In 2002, Danes drank 9.5 litres of pure alcohol on average, while Norwegians drank 4.4 litres, Italians drank 7.4 litres and the British drank 9.6 litres. It is estimated that half a million Danes have an alcohol consumption that exceeds the recommended safe alcohol intake limits outlined by the Danish National Board of Health – and that 160,000 Danes are alcohol dependent.

The public funded treatment of alcohol dependence is currently managed by the Danish counties, but will become the responsibility of the individual municipalities from January 1st, 2007. Alcohol treatment in Denmark does not have a standardised structure but is implemented in different ways and within different sectors. Alcohol treatment can e.g. vary from visits to the general practitioner to outpatient treatments at alcohol outpatient facilities/private treatment facilities as well as admission to the hospital for outpatient treatment.

The field of alcohol treatment in Denmark is generally characterized by heterogeneous treatment offers, varying quantity of documentation and lack of systematic quality assurance. A recent study has shown that only very few Danish treatment facilities utilize evidence-based alcohol treatment programs.

## Purpose

The purpose of this Health Technology Assessment is to describe the effect of treatment programs for persons with alcohol dependence as well as to describe organizational, patient related and financially related health aspects of the treatment. The aim of the report is to serve as a starting point for the on-going quality development of alcohol dependency treatment in Denmark.

## Method

Systematic literature searches were performed in correspondence with the four aspects of the concept of HTA: technology, organization, patient and finance. The report is primarily based on secondary literature, including HTA-reports, meta-analyses and systematic literature examination including Cochrane reviews. Guidelines were also included and, where relevant, supplemented with relatively recent primary studies, especially in areas where no secondary literature exist. A substantial amount of relevant literature concerning the effect of the treatment programs themselves (the technology) was found – particularly regarding the pharmacological treatment – while no considerable amount of literature was located concerning the other three aspects: organization, patient and finance.

## Results

The literature examination of the *alcohol treatment programs (the technology)* shows that there is documentation for effects of various types of treatment. There is solid documentation for the effectiveness of benzodiazepines for treatment of the abstinence syndrome regarding *acute detoxification* and *abstinence treatment*.

The report concludes that treatment using the drugs acamprosat and naltrexon is effective in the *pharmacological treatment* of alcohol dependence regarding abstinence and adherence to psychosocial

treatment. Acamprosate is particularly effective in patients that experience strong drinking urges, so-called cravings, and anxiety symptoms, while naltrexone is especially effective in patients who develop dependence early and in those that are genetically predisposed. There is no documentation that unsupervised treatment with antabuse has an effect. However, supervised antabuse treatment is significantly better than unsupervised treatment with antabuse. In general, pharmacological treatment of alcohol dependence should always be administered in combination with some type of psychosocial intervention.

In the matter of *psychosocial treatment* of alcohol dependence the report concludes that specific treatment programs targeting the abuse itself are more effective than general support and standard treatment. Treatment within a cognitive-behavioral frame of reference is an effective program among the specific psychosocial treatment programs with regards to reduction of alcohol consumption and improvement of the psychosocial output. Involvement of the family in the treatment generally increases the effectiveness as well as the likelihood that the alcohol dependent person seeks treatment.

The report also illustrates that the Community Reinforcement Approach (CRA) is effective – especially among patients with severe addiction. Motivation enhancement treatment as an independent program is moderately effective, but if this treatment is administered prior to other treatment the combined effectiveness of the treatment increases. Self-help information issued on request or upon agreement with the patient is more effective than no treatment. The 12-step program is more effective than the standard treatment but the documentation for this type of treatment is still sparse.

The literature review of the *patient-related aspects* of alcohol treatment indicated that these aspects are poorly researched. The few existing studies were carried out among patients who have already been in contact with the treatment system – and therefore very little knowledge exists of the group of alcohol dependent citizens who do not seek treatment. Other patient-related studies show that it is presumably possible to strengthen the effects of the treatment programs by matching the program to the individual patient profile, i.e. by differentiating treatment programs instead of offering uniform programs to all alcohol dependents. Finally, this part of the report shows that alcohol dependents with psychiatric disorders, also called psychiatric co-morbidity, are common. In this case it is important to be aware that untreated anxiety- and depression disorders are associated with lower compliance and effect of alcohol treatment.

The literature review of the *organizational aspects* of alcohol treatment concluded that documentation is sparse when it comes to measures that could ensure an effective organization of alcohol treatment. It is for example not possible to unambiguously document differences in effectiveness between outpatient treatments, day treatments and inpatient treatments. Likewise, it is not possible to comment on the relative effectiveness of different organizational models. At the same time, the literature emphasizes the importance of identifying which alcohol dependents achieve a greater benefit of inpatient treatment rather than outpatient treatment. The literature indicates that patients with lesser or moderate alcohol dependence profit greater from outpatient treatment than inpatient treatment, while the opposite may be true for severely alcohol-dependent persons. It also seems that presenting a wide range of treatment offers to alcohol dependents is the most effective approach.

The literature review of the *financial aspects* of alcohol treatment identified some international documentation showing that effective treatments are also cost-effective. However, due to lack of knowledge concerning, among other things, operating costs and the actual contents of the treatments it is impossible to designate which forms of treatment are cost-effective in a Danish setting. In summary, the international studies indicate that alcohol treatment is cost-effective in comparison to hospital admission due to non-treatment. The socio-economic costs of large-scale alcohol consumption in Denmark have been estimated at 10 billion Danish kroner (DKK) a year (using prices from 1996), of which 3,134 million DKK are used for health expenses, 4,794 million for loss of

production and the remaining expenses are due to crime, traffic accidents, prevention etc. In 2003, 123 million DKK were used for public alcohol treatment.

### Putting the results into perspective

The main conclusion of the report is that several pharmacological and psychosocial treatment programs have positive effects on alcohol dependence. The results of this report provide the basis for the individual Danish treatment facilities to review and consider their current treatment options. In addition, the report supplies evidence-based professional input for the preparation of a combined treatment offer for persons with alcohol dependence.

Alcohol dependent citizens constitute a very heterogeneous group. It is therefore necessary to approach the individual patient and assess what treatment would benefit this person most. Such an assessment presumes e.g. that there is the possibility of carrying out a satisfactory analysis and diagnosis of the severity of the alcohol abuse and its nature as well as the possibility of suggesting both pharmacological and psychosocial treatment offers. This type of differentiated, needs oriented approach can gainfully be supported by development of clinical guidelines and national reference programs in the field of alcohol treatment.