

Marketing Status and Perceived Efficacy of Drugs for Supporting Abstinence and Reducing Alcohol Intake in Alcohol Use Disorders: A Survey among European Federation of Addiction Societies in Europe

Jørgen G. Bramness^a Karl Mann^b Friedrich M. Wurst^{c–e}

^aNorwegian Centre for Addiction Research, University of Oslo, Oslo, Norway; ^bCentral Institute of Mental Health Mannheim, Medical Faculty Mannheim, University of Heidelberg, Mannheim, and ^cCentre for Interdisciplinary Addiction Research, University of Hamburg, Hamburg, Germany; ^dParacelsus Medical University, Salzburg, Austria; ^eHELIOS St. Vincenz Klinik Duisburg, Germany

Key Words

Alcohol use disorder · Disulfiram · Naltrexone · Acamprosate · Nalmefene

Abstract

Background: Acamprosate, disulfiram (DIS), naltrexone and nalmefene can be used in treating alcohol use disorders. The drugs are, however, underutilized. **Methods:** In this survey of marketing status and perceived efficacy, member societies of the European federation for addiction societies were asked to report on the status of these drugs in their country. Results were obtained from 20 European countries showing that the drugs were registered in most countries. **Results and Conclusion:** The drugs were mentioned in guidelines in approximately half and were partially or fully reimbursed in half to two-thirds countries. DIS was perceived as the most efficacious drug. These results are discussed.

© 2016 S. Karger AG, Basel

Introduction

Alcohol use disorders (AUDs) with 4% prevalence worldwide cause more deaths than HIV, violence or tuberculosis. In Europe, AUDs are common with a yearly prevalence of over 6% for men and over 1% for women [1]. The cost for individuals and society are high, for example, shown by a loss of disability-adjusted life years of more than 3% of the total.

In general hospitals, up to 20% of all in-patients suffer from an AUD. The rates in surgery departments range from 16 to 35% [2, 3] leading to a number of unwanted consequences, including prolonged hospitalization [2–4], more time in intensive care units and higher rates of complications [4]. Even in the face of these figures, AUD often goes undetected.

The survey has been done as a membership survey for European Federation of Addiction Societies (EUFAS; <http://www.eufas.net/>).

AUD are, however, not only underdiagnosed, but there is also a substantial treatment gap, with less than 1 in 10 sufferers being treated [5]. This treatment gap is very evident in general practice [6]. Although psycho- and pharmaco-therapeutical treatments for AUD have proven effective and are available [7], the use of pharmaceuticals could play a much larger role than today [8]. Acamprosate (ACA), disulfiram (DIS) and naltrexone (NTX) have been shown to be effective for abstinence-oriented treatment [9–11] and nalmefene (NMF) and NTX have been shown to be helpful for reducing heavy drinking [12]. These drugs are currently underused. The purpose of this survey was to investigate the licensing and marketing status of these drugs, whether they are mentioned in guidelines, if they are reimbursed and their perceived efficacy in Europe.

Materials and Methods

A web-based questionnaire was sent to representatives from all member societies of the European Federation for Addiction Societies (EUFAS) at the beginning of 2014. Questions were asked about the registry status (no marketing authorization, marketing authorization, actually marketed), if mentioned in guidelines (no vs. yes), degree of reimbursement (none, partial reimbursement, full reimbursement) and the perceived clinical efficacy (no, marginal, some, large) for each of the 4 drugs: ACA, DIS, NMF and NTX.

Results

All EUFAS member states except Ireland, Luxembourg and Switzerland responded to the questionnaire, amounting to 24 answers from 20 national societies, as some countries have more than one society. As of early 2014, ACA was registered in all but 3, DIS in all and NMF and NTX in all but 2 European countries (fig. 1). The drugs were mentioned in guidelines in approximately half the countries (table 1). The drugs were partially or fully reimbursed in half to two-thirds of the countries. DIS was perceived as the most efficacious drug, followed by NMF, NTX and ACA.

Discussion

Most European countries had the 4 drugs licensed, with some exceptions. In 2014, NMF was not yet marketed in Germany and France, but has been launched

since. Interestingly, even though DIS had market authorization in most countries, it had been withdrawn from the market in Germany and Austria as of early 2014, possibly because of low sales. There are rumors that the drug is under threat of being withdrawn in other European countries as well. This may illustrate the low and even declining use of these drugs and may lead us to view drugs for AUD more as orphan drugs. This means that governmental authorities, rather than purely controlling the marketing and spread of these drugs, should shift their efforts to ensure the availability of these drugs for the treatment of AUD.

Several factors could help explain the underuse of these drugs in Europe. The drugs were mentioned in guidelines in only around half of the European countries. Lack of mention could be both due to the lack of guidelines altogether and the lack of mention in existing guidelines. The absence of the drugs in guidelines may contribute to low use, a limitation in this survey being that we did not ask for the existence of guidelines as such. Also, the drugs were more often partially than fully reimbursed. Some countries will have substantial use of other drugs for AUDs, which might explain low use of the investigated drugs. The most obvious examples would be γ -hydroxybutyric acid in Italy and Austria and baclofen in France, but other drugs like topiramate, ondansetron, bupropion and benzodiazepines have been used. And lastly, the drugs investigated were over all perceived as 'somewhat efficient', which seems accurate given the evidence for their efficacy. We know from the literature that their effect sizes are modest, but they are still comparable to what is seen in several other areas in medicine [13]. There were only marginal differences in the perception of the different drugs, but DIS was seen as somewhat more efficacious and ACA slightly less so than the other drugs.

Even if the drugs for AUD are not sufficient to treat the disorder fully, they are undoubtedly effective treatment. The low levels of use could be viewed as problematic, leaving many patients untreated and with suboptimal help. Future research should try to enhance effect sizes of these drugs, possibly through better a priori characterization of potential responders [14, 15]. There is a need to include these drugs in guidelines and to educate clinicians about their proper use. More comprehensive reimbursement would probably be cost effective and should be considered in many countries not currently doing so. Also governmental bodies should, to a larger extent, focus on ensuring the availability of these drugs. Only through

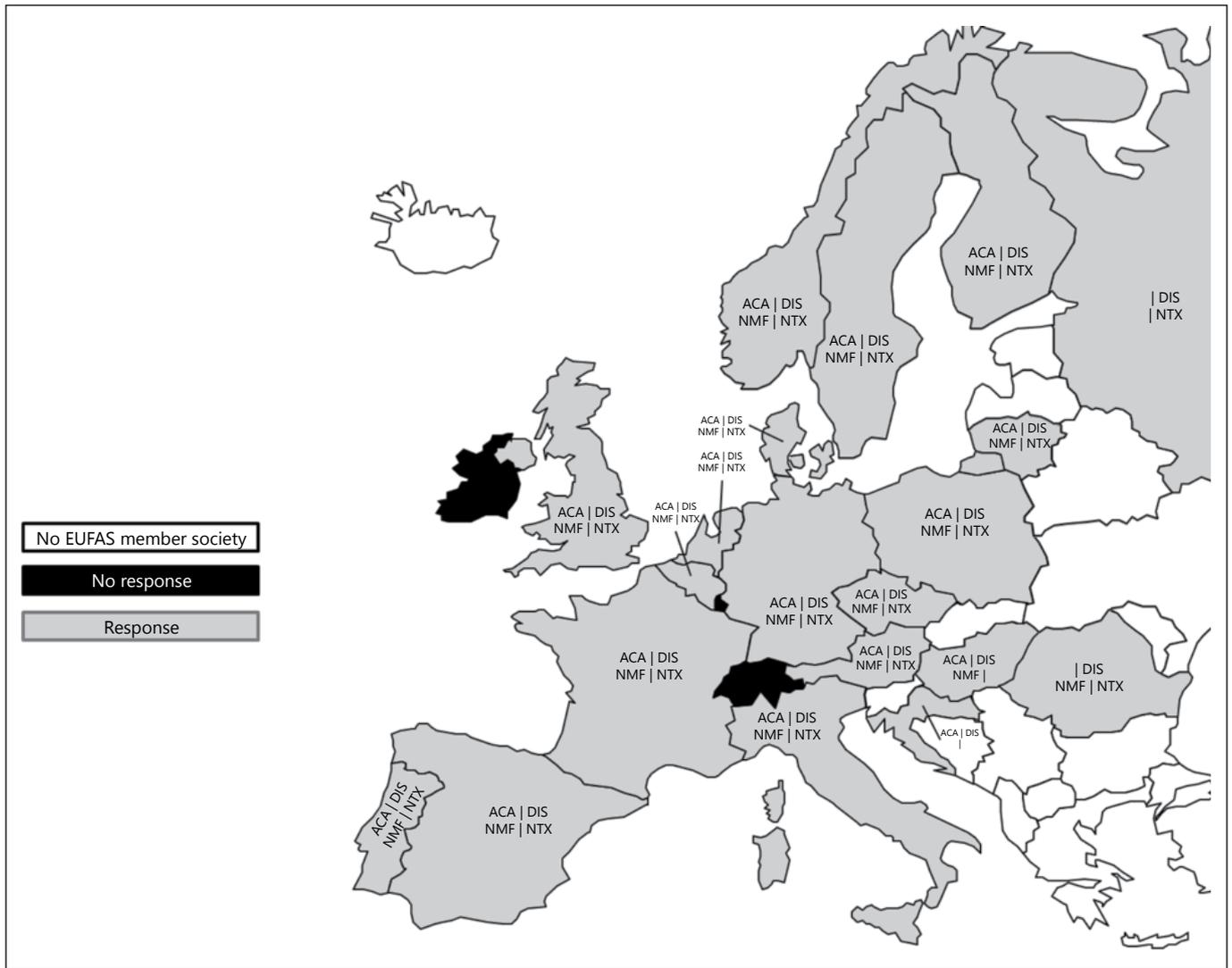


Fig. 1. Map of Europe with the marketing status of the drugs ACA, DIS, NMF and NTX. Drugs with marketing authorization that were marketed are in capital (upper case) letters (e.g., ACA), while those with market authorization, but not marketed are in lower

case letters (e.g., ACA). Drugs without market authorization are not mentioned. Since the time of the survey, NMF has been marketed in France and Germany.

Table 1. Answers from EUFAS member societies on questions regarding whether the drugs are mentioned in guidelines, if the drugs are reimbursed and how the responder perceives the drug's efficacy as of early 2014

| Question | Response | ACA | DIS | NMF | NTX |
|--------------------------|---|----------|----------|----------|----------|
| Mentioned in guidelines? | Number yes/all answer | 9/19 | 11/19 | 11/19 | 11/19 |
| Reimbursed? | Number yes partially + yes full/all answer | 7+5/18 | 9+3/20 | 7+2/19 | 6+6/20 |
| Perceived efficacy | Average of 'no' = 0, 'marginal' = 1, 'some' = 2, 'large' = 3 of (N) | 1.8 (18) | 2.2 (20) | 2.0 (12) | 1.9 (20) |

such measures increased clinical use can be ensured, saving lives and healthy living years currently lost to AUD.

Disclosure Statement

During the last 3 years, J.G.B. has received no funding; K.M. and F.W. have received speaker honoraria from Lundbeck. In the context of this paper, none of the authors have any conflict of interest to report.

Acknowledgments

The authors would like to thank the EUFAS for use of membership lists of the representatives of the European national societies and for these societies in Austria, Belgium, Croatia, Czech Republic, Denmark, Finland, France, Germany, Holland, Hungary, Italy, Lithuania, Norway, Poland, Portugal, Romania, Russia, Spain, Sweden and United Kingdom for taking the time to answer this survey. The authors also thank Bente Irene, Hafslund Vassbotn and Pål Henrik Lillevold at the Norwegian Centre for Addiction Research for technical support.

References

- 1 Rehm J, Room R, van den Brink W, Jacobi F: Alcohol use disorders in EU countries and Norway: an overview of the epidemiology. *Eur Neuropsychopharmacol* 2005;15:377–388.
- 2 Tonnesen H, Kehlet H: Preoperative alcoholism and postoperative morbidity. *Br J Surg* 1999;86:869–874.
- 3 Spies C, Tonnesen H, Andreasson S, Helander A, Conigrave K: Perioperative morbidity and mortality in chronic alcoholic patients. *Alcohol Clin Exp Res* 2001;25(5 suppl):164S–170S.
- 4 Rubinsky AD, Sun H, Blough DK, Maynard C, Bryson CL, Harris AH, et al: AUDIT-C alcohol screening results and postoperative inpatient health care use. *J Am Coll Surg* 2012; 214:296–305.e1.
- 5 Drummond C, Gual A, Goos C, Godfrey C, Deluca P, Von Der Goltz C, et al: Identifying the gap between need and intervention for alcohol use disorders in Europe. *Addiction* 2011;106(suppl 1):31–36.
- 6 Weisner C, Mertens J, Parthasarathy S, Moore C, Lu Y: Integrating primary medical care with addiction treatment: a randomized controlled trial. *JAMA* 2001;286:1715–1723.
- 7 Mann K, Hoch E, Batra A: S3-Leitlinien für Alkoholbezogene Störungen (evidence based guidelines for alcohol use disorders). Springer, 2015.
- 8 Rehm J, Shield KD, Rehm MX, Gmel G Jr, Frick U: Alcohol consumption, alcohol dependence, and attributable burden of disease in Europe: potential gains from effective interventions for alcohol dependence. Toronto, Canada Centre for Addiction and Mental Health, 2012.
- 9 Jonas DE, Feltner C, Garbutt JC: Medications for alcohol use disorders – reply. *JAMA* 2014; 312:1351.
- 10 Rösner S, Hackl-Herrwerth A, Leucht S, Lehert P, Vecchi S, Soyka M: Acamprosate for alcohol dependence. *Cochrane Database Syst Rev* 2010;9:CD004332.
- 11 Srisurapanont M, Jarusuraisin N: Opioid antagonists for alcohol dependence. *Cochrane Database Syst Rev* 2005;12:CD001867.
- 12 Mann K, Bladström A, Torup L, Gual A, van den Brink W: Extending the treatment options in alcohol dependence: a randomized controlled study of as-needed nalmefene. *Biol Psychiatry* 2013;73:706–713.
- 13 Leucht S, Tardy M, Komossa K, Heres S, Kissling W, Salanti G, et al: Antipsychotic drugs versus placebo for relapse prevention in schizophrenia: a systematic review and meta-analysis. *Lancet* 2012;379:2063–2071.
- 14 Mann K, Kiefer F, Smolka M, Gann H, Wellek S, Heinz A; PREDICT Study Research Team: Searching for responders to acamprosate and naltrexone in alcoholism treatment: rationale and design of the PREDICT study. *Alcohol Clin Exp Res* 2009;33:674–683.
- 15 Mann K, Lemenager T, Hoffmann S, Reinhard I, Hermann D, Batra A, et al; PREDICT Study Team: Results of a double-blind, placebo-controlled pharmacotherapy trial in alcoholism conducted in Germany and comparison with the US COMBINE study. *Addict Biol* 2013;18:937–946.