

Alcohol addiction/Expert

Epidemiology

Incidence/Prevalence

In Germany, men drink more frequently and in larger quantities than women: 15.6 percent of men and 12.8 percent of women report risky consumption within one year. The 12-month prevalence of binge drinking is also much higher among men at 46.8 percent than among women at just under 22 percent. Both alcohol abuse with 4.7 per cent (vs. 1.5 per cent for women) and dependence with 4.8 per cent (vs. two per cent for women) are significantly more common among men (both according to DSM-IV criteria).[1] Alcohol abuse and dependence occur most frequently in young adulthood and decrease steadily with age. Before the age of 18, the frequency and extent of alcohol consumption are very similar for both sexes. The male dominance then develops only in adulthood.[2] The 12-month prevalence of alcohol abuse and dependence is shown in Figure 1.

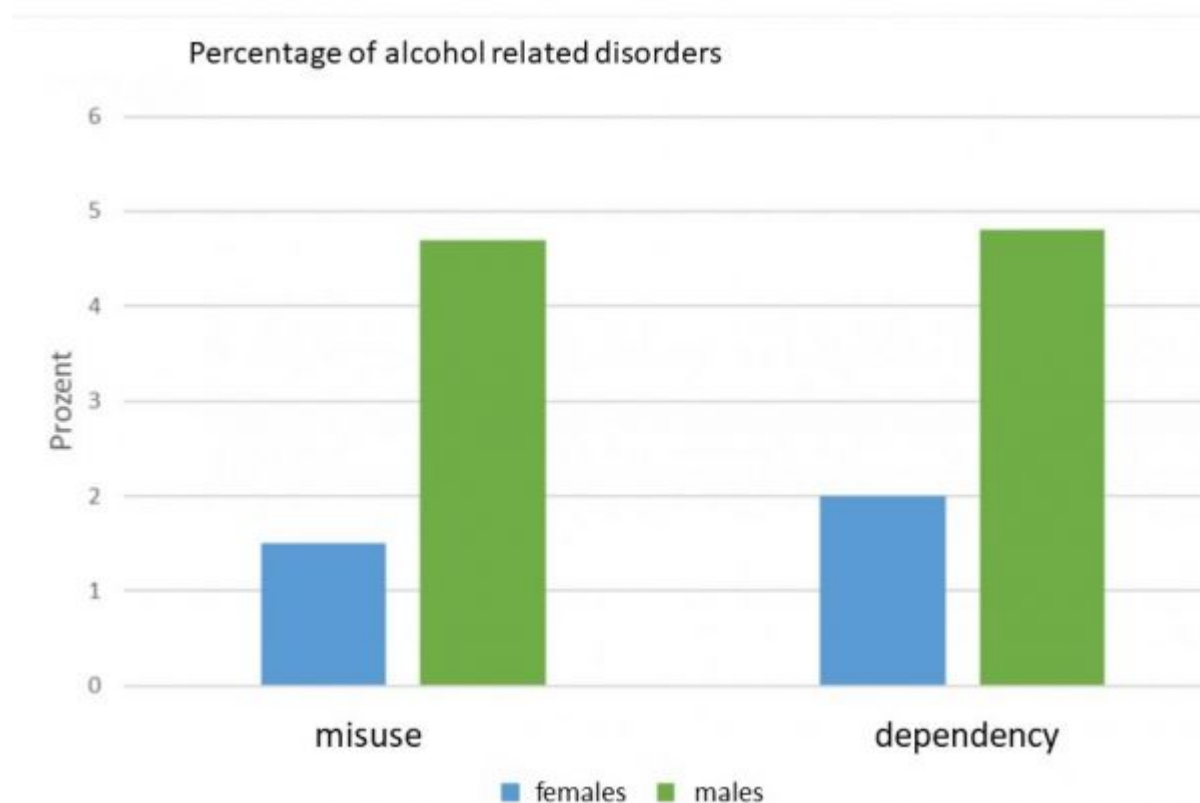


Figure 1: Prevalence of alcohol-related disorders divided into men (n = 3906) and women (n = 5108). [Source: GenderMed-Wiki, based on Pabst et al.(2013)]

Risk and protective factors

Pathophysiology

Women show an increased vulnerability to the toxic effects of alcohol. In part, this seems to be related to the fact that women reach a higher alcohol level when drinking the same amount, their concentration of alcohol dehydrogenase is lower, and thus their alcohol metabolism is slower than that of men.[3] Even at comparable alcohol levels, women are significantly more likely to express cognitive impairment, drowsiness or sleep disturbances. Men, on the other hand, react more aggressively than women at similar alcohol levels.[4] Women have a higher risk of liver disease (including cirrhosis) as a result of alcohol consumption. In addition, the female heart is attacked more quickly by alcohol, which is shown by the fact that women can develop alcoholic cardiomyopathy even after comparatively lower alcohol consumption (in relation to the whole life). The likelihood of developing certain forms of cancer also varies according to sex:[5] Alcohol consumption increases the risk of breast cancer especially in women, while in men the risk of cancer of the mouth, throat and oesophagus increases. The mortality rate increases in women already with a consumption of two and a half glasses daily, while this is observed in men only with a consumption of four and a half glasses daily.[6] Special risks for women exist during pregnancy. Alcohol consumption is associated, among other things, with spontaneous miscarriages or the development of a fetal alcohol syndrome disorder.

Clinical presentation

Symptoms

Women are more likely to cite coping as a reason for drinking (drinking alcohol as a coping strategy), while men are more likely to cite pleasure as a motivation. Women with very high alcohol consumption are more likely to react to stress and social problems with craving and relapse into addiction, while men are more sensitive to consumption-associated cues.[7]

Diagnostics

Patient management

Therapy

Physician-patient interaction

Treatment outcome

Pharmacotherapy

Table 1. Sex differences in the effect of various drugs in alcohol dependence.

Drug	Sex specific effect
	<p>For naltrexone, it is unclear whether there are differences in effectiveness between the sexes.[8] Various studies show reduced consumption and craving for both sexes through the use of naltrexone (often in combination with psychological therapies).[9] [10] Since several substances are often used in parallel, interactions may occur.</p> <p>As several substances are often consumed in parallel, interactions can occur. These interactions can be influenced by gender and should be taken into account during pharmacotherapy.[11] In a study with people who were addicted to both alcohol and cocaine, only men reduced their substance use after administration of naltrexone, whereas women increased it.[12] The authors justified this with the rather high dose (150 mg/day), which may have triggered stronger side effects in women and thus impaired effectiveness. In line with this assumption, another study showed that side effects (such as nausea) were more frequent in women treated with naltrexone compared to men and controls.[13] In addition, only women showed increased cortisol levels and were more affected by side effects when they were in the luteal phase rather than the early follicular phase. So far, mainly the oral intake of naltrexone has been investigated. However, an injectable version also exists, the effectiveness of which seems to be more proven in alcoholic men.[14]</p>
Naltrexone	
	<p>In direct comparison with a daily application of naltrexone (50 mg), pregabalin shows a greater effect in terms of a stronger reduction of alcohol consumption. This is possibly related to the anxiolytic effect of pregabalin, as comorbid psychiatric symptoms (e.g. anxiety) often accompany alcohol dependence. The study thus indicates that drug treatment is more successful if comorbid psychiatric disorders are taken into account in the process.[15]</p>
Pregabalin	

Other medications for alcohol dependence & alcohol withdrawal syndrome

For some medications used for the treatment of alcohol dependence or alcohol withdrawal syndrome, it remains unclear whether sex differences in effectiveness exist. Due to the insufficient number of women in clinical trials, no firm statements can be made about the sex-specific effectiveness and safety of disulfiram, anticonvulsants, gamma-hydroxybutyric acid and benzodiazepines. Only for nalmefene and acamprosate was the size of the female subject collective sufficient, so that here it could be established that there were no sex differences.[16]

Further therapeutic options and aspects

Table 2: Sex differences in non-drug therapy options.

Therapy approach/content	Sex sensitive approach
Berücksichtigung psychischer Komorbiditäten	<p>A study with alcoholics showed that traumatic experiences and symptoms associated with trauma are significantly associated with relapse only in women.[17] In addition, dependent women who have received treatment for comorbid depression are also more likely to have a successful drug treatment.[18] The results of the study show that women are more likely to relapse.</p>
Group therapy	<p>Men seem to benefit more from clear structures (such as in Alcoholics Anonymous). Women are more likely to need groups where emotions are worked on and skills such as self-confidence or self-efficacy are practised for treatment success. For women, gender-homogeneous groups are more recommended, as issues relevant to them can be discussed better this way.[19]</p>
Kognitive Verhaltenstherapie als Paar	<p>For women, social support is a factor that influences both the uptake of therapy and the success of treatment more strongly than for men. In addition, their partner's substance use has an increasing effect on their own use. These aspects can be treated in women through joint cognitive behavioural therapy. Overall, the findings show that a therapy together with the partner can be effective for the goal of reducing alcohol consumption or remaining abstinent. Individual sessions as a supplement increase this effect even more in women.</p>

Psychosocial factors

Prevention

Translation into patient care

Open research questions

Outlook

External Links

Literature

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