Substance use disorders/Introduction

In Germany, about 31 percent of men and 15 percent of women are addicted to some substance at least once in their lives.[1] The same applies to most substances: Men are addicted significantly more often than women and usually also consume a larger quantity.[2] An exception is drug addiction: for example, for painkillers, sleeping pills and tranquillisers, there is a higher dependence for the female sex.[3] Furthermore, there are indications that the frequency of various addictions (especially smoking) converges between the sexes: Gender differences are lowest in younger generations and highest in older generations. This suggests a cultural shift associated with increased substance use and abuse, particularly among women.[4]

Although men use almost all drugs more and more frequently compared to women and have substance use disorders more often, paradoxically it is women who develop dependence more quickly and also go through typical phases of drug use (e.g. lower age of initiation, earlier entry into rehabilitation, shorter period of abstinence from drugs) earlier or more quickly. [5] This increased susceptibility is explained by the fact that women are more affected by the positive, i.e. rewarding, effect of drugs due to the activity of the female sex hormone oestrogen.[6] Accordingly, the subjective effect of drugs in women also varies depending on the cycle phase.[7] Thus, oestrogen increases strongly in the first cycle phase (the so-called follicular phase), which also significantly increases the craving for the respective substance. Due to the hormonal influence in the second cycle phase (the so-called luteal phase), the increased craving is then reduced again. Long-term use of the contraceptive pill and the associated influence on the natural hormonal cycle is also a risk factor for the development of dependence.[8] In boys during puberty, the male sex hormone testosterone ensures that they are often more impulsive and more interested in events that promise excitement compared to girls, which is assumed to be one reason for higher dependence levels. [9] However, it is important to understand the influence of sex hormones not as an isolated risk factor, but always in conjunction with social and other biological influences.[10][11]

Some medications prescribed to reduce drug cravings may have different effects depending on sex. One such drug is naltrexone. It has been shown that in a sex comparison, the same dose can lead to significant side effects (e.g. nausea) in women, whereas it is well tolerated in men.[12] These side effects can then lead to naltrexone being less effective in women than in men. One consequence should therefore be to use dosages that are adjusted to gender, or at least body weight, when administering medication.[13]

Sex differences are also evident in treatment in group therapies. Men seem to benefit more from clear structures, such as those found in Alcoholics Anonymous.[14] For women, groups in which emotions are worked on and skills such as self-confidence or self-efficacy are practised are more helpful. Same-sex groups are more recommended for this purpose, as they are better able to address and discuss relevant issues among women.[15]

Women and men seem to differ in their motivation for drug use. Prevention programmes should therefore start precisely here: Men are more likely to use drugs for pleasure, women more likely to use drugs to alleviate negative feelings (e.g. anxiety, depression or stress).[16] Prevention programmes are therefore recommended for boys and men in which sensible alternatives to drug use are suggested and, above all, the negative consequences are discussed. Girls and women should especially be introduced to healthy and effective coping strategies. In order for successful prevention or even treatment of substance use disorders to be possible for both sexes, awareness must be created in society that women are also affected and that the disease can have a different impact on women than on men. Up to now, there has often been a stigmatisation of addicted women.

As a result, affected women often do not seek specialised treatment because they feel ashamed or fear being judged.[17]

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