## The term "sex"/Expert

Biological elements such as chromosomes, reproductive organs and specific hormones affect the expression of phenotypic traits generally associated with female or male species and is described by the term "sex".

It is important to not only consider the obvious physiological and anatomical sex differences (e.g. body size, body hair or primary sex organs), but also differences regarding genetics, hormone balance, immune system and metabolic profile. The biological basis of these differences results from an interplay between genes and sex hormones. ${ }^{[1]}$ This interplay ultimately leads to sex and gender differences in the risk profile, in the response to (drug) treatments or in the pathophysiological effects, among other things. ${ }^{[2]}$

Several dimensions can be differentiated in regard to sex. The chromosomal sex of a child (XX or XY) is already determined at fertilization. Depending on the chromosomal determination, testicles or ovaries develop from the original gonadal gland, and is referred to as gonadal sex. As a result of the sex hormones of the respective gonads, the other sex organs (genital sex) develop. ${ }^{[3]}$

Due to significant sex differences between men and women, specific clinical pictures with individual treatment needs arise. Pregnancy, birth, menstrual cycle and menopause, for example, affect only the female body. On the other hand, other disease patterns occur in both sexes, but do not express themselves with identical symptoms. Therefore, cardiovascular diseases are one of the leading causes of death in women, partly because the symptoms differ from those of men and are not always correctly classified from the medical perspective. ${ }^{[4]}$

It is important to stress however that "sex" and "gender" are not separate entities. Rather, there is a lifelong interaction at the biological and social level, which plays a role in medicine for almost all disease processes. ${ }^{[1]}$

## Literature

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