

Sex and Gender Differences in Suicide and Suicidal Tendencies/Expert

Epidemiology

Incidence/Prevalence

Suicide figures have been recorded in Germany since the end of the 19th century (suicide attempts, however, are not officially recorded). Since the 1990s there has been a continuous decline in suicide statistics with a short-term increase between 2008 and 2011, which was largely at the expense of men (the economic crisis is suspected to be the cause). ^[1]

Epidemiological sex differences have been documented since the beginning of this survey and have been established worldwide. Men commit suicide up to three times more often than women (and use much more aggressive methods). In Germany, for example, 2603 women and 7287 men committed suicide in 2012. For both sexes, the suicide rate (suicides per 100,000 persons of the general population per year) increases with age but is much higher for men. While the suicide rate for women between 85 and 90 years of age is around 15, significantly more men in the same age group commit suicide (suicide rate of 73.2, see Table 1). ^[2] Influencing factors are mostly social and emotional isolation. Schmidtke et al. (2008) demonstrate that suicide in old age is no longer solely a male problem. They show that one in two suicides among women in Germany is committed in the over-60 age group. ^[3]

Table 1: Suicide rates per 100 000 inhabitants between 1990 and 2012 for men and women in different age groups. [Source: NASPRO, 2012]

Age group	Male suicide rate	Female suicide rate
20-25	11.9	3.2
60-65	22.9	7.1
85-90	73.2	15.1

Suicide attempts, on the other hand, are more likely to be observed in younger people. The sex ratio is reversed here, often younger women are affected. For example, Weissmann et al. (1999) give a lifetime rate of suicide attempts of 2.8 percent for men and 4.1 percent for women in West Germany, whereby this sex difference could be validated in all examined countries. ^[4]

Risk and protective factors

The greatest risk factor for suicide is mental illness. Depression in particular, but also schizophrenic or addictive disorders dramatically increase the risk of suicide. In this context, 90 percent of all suicides are associated with a mental illness, mostly with depression (up to 70 percent).^[5] Although depression is diagnosed about twice as often in women as in men, the proportion of men who have committed suicide as a result of depression, at 60 to 70 percent, is significantly higher than women. It is therefore reasonable to assume that depression in men is associated with a much higher risk of suicide.^[6] In a 2007 study, 314 patients with depression or bipolar disorder were examined two years after finishing treatment. During this period, 16.6 percent of those affected had committed suicide or at least attempted to do so. The authors were able to identify risk factors that differed in part between the sexes (see Table 2).^[7]

Table 2: Risk factors for suicide in men and women. [Source: Oquendo et al. (2007)]

Men	Women
<ul style="list-style-type: none">• History of suicide in the family• Previous drug use• Early separation of parents• Smoking• Borderline Personality Disorder	<ul style="list-style-type: none">• Suicide attempts• Hostility• Subjective depressive symptoms• Smoking• Borderline Personality Disorder• Few personal reasons for living

According to Dumais et al (2005), the risk of suicide seems to be increased by impulsiveness and aggression, especially in younger male patients (between 18 and 40 years of age). In this context, these disinhibitory factors lead to changes in serotonergic activity and promote the translation of suicidal thoughts into concrete actions.^[8]

With regard to schizophrenic disorders, the highest risk of suicide lies with younger men: additional influencing factors such as a good educational background, paranoid-hallucinatory symptoms, good response to (neuroleptic) therapy, knowledge about the disease and its possible course, as well as a significant degree of suffering are characteristic of suicidal behaviour.^[1]

The sex paradox

The increased rate of suicide with a lower rate of attempted suicide among men compared to women is scientifically discussed as a sex paradox.^[9] A particular paradox appears to be that attempted suicide is considered the strongest predictor of future suicides and therefore women should have a higher suicide rate than men.^[1] The following table (Table 3) provides explanations for the sex paradox.

Table 3: Explanatory approaches to the sex paradox.

Suicidal factors in men	Explanation
Use of more severe methods of suicide	Even though there seems to be no sex difference in the intention to die in suicide attempts, men on average choose more aggressive methods. This reduces the probability of survival. ^[9]

Fewer requests for help	Mental illness is diagnosed significantly less frequently in men than in women. Not only do they show less willingness to seek help, but they also verbalise their suffering less often and have a lesser tendency to seek treatment. ^[10]
Dysfunctional coping strategies	Men try to cope more often with the help of alcohol. ^[10] This increases also the probability of suicide.
Vulnerability in times of crisis and separation	Separation or death of the partner, as well as living alone, are more strongly associated with suicide in men than in women. ^[10] Reasons could be that men have less emotionally supportive alternative resources, are less flexible in their roles, and more often lose their children and home in the event of separation. ^[11]
Less protection factor "parenthood"	Parenthood as a protective factor works less effectively for men than it does for women. ^[10] Motherhood may be associated with a greater sense of connection than fatherhood. The feeling of attachment is a decisive protective factor against suicide. ^[12]
Male stereotype	With the socially shaped gender role, suicide in men is more easily reconciled with attempted suicide, which shapes the execution of suicidal acts. ^[12] Failure at work is also more strongly associated with social failure in men than in women. It can be assumed that the consequences of the economic crisis of 2008 (loss of employment as well as financial resources) were correlated with an increased suicide rate mainly among men of working age. ^[13]

Suicide and suicidal tendencies among physicians

The health care system often fails to take into account the psychological well-being of health professionals. This results in a higher suicide rate among female and male medical personnel than in the general population. ^[14] According to the results of 14 international studies, the suicide rate for this profession is 1.3 to 3.4 times higher; among female medical personnel compared to the female general population, this rate is even 2.5 to 5.7 times higher. ^[15] In contrast to the general population, there are no sex differences in the frequency of suicide among doctors: female doctors are just as likely to commit suicide as their male colleagues. In a German study from 1986, half of the female and male physicians questioned stated that they had already had suicidal intentions in their lives, two thirds thought it was possible to commit suicide in the future. ^[16] In a Norwegian study from 2000, one in ten physicians stated that they had already had serious suicidal intentions at some point, female physicians reported suicidal thoughts significantly more often than male physicians. ^[17]

In general, the lifetime prevalence of depressive disorders is as high or higher among physicians than in the general population (and particularly high at the beginning of the residency period). ^[18]

This results in a particularly high risk of depression for female physicians.^{[19] [20]} Among other things, the extremely heavy workload, but also social deprivation seems to be responsible.^[14] Especially for female physicians with children, the constant dual burden and the feeling of not being able to do justice to the role as mother and professional can lead to frustration and severe states of exhaustion.^{[21] [22]} Furthermore, the lack of an adequate female role model as well as a lack of family and professional support are suspected as risk factors for suicidal behaviour among female physicians.^{[23] [24]}

Substance abuse and dependence are also important risk factors for suicidal acts. An increased risk of addiction among doctors can be verified,^{[25] [26]} ten to 15 percent of doctors appear to develop a problematic handling of alcohol and other drugs in their lifetime.^[27]

Outlook

One of the greatest risk factors for suicide is the presence of depression. Presently, there remains a societal “depression blindness” in men and a related significant underdiagnosis. To counteract this, a sound knowledge of sex and gender differences in the phenomenon of depression is necessary.^[28]^[29]

Sex and gender sensitive suicide prevention is rarely found. One approach to preventive measures for men could be the availability of prevention programmes in the workplace.^[30] In general, a rethinking of male gender roles is necessary to promote the acceptance of mental illness among men and to increase the number of men seeking help.^[1]

Literature

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