# Somatoform Disorders/Expert

## Epidemiology

### Incidence/Prevalence

Somatoform diseases show a clear sex difference in terms of epidemiological data, with generally higher prevalence figures for the female sex. In the study Health of Adults in Germany from 2014, 12-month prevalences of 1.7 percent in men and 5.2 percent in women (18 to 79 years) were found. [1] An age effect can be observed particularly in men: While only three percent of 18- to 35-year-olds suffer from psychosomatic symptoms, the figure for 46- to 65-year-olds increases to seven percent. [2] The fact that age has a smaller effect on psychosomatic symptoms in women is probably due to a significantly higher initial figure. More detailed information on the influence of age and sex on somatoform disorders can be found in Table 1.

**Table 1: Prevalence of somatoform disorders in Germany (one-month prevalence). [Source: Wittchen et al., 1999].**

| Age Group | Prevalence– Women | Prevalence - Men | Odds Ratio (w:m) |
|---|---|---|---|
| 18-35 | 8.9% | 3.1% | 3.01 |
| 36-45 | 11.1% | 4.5% | 2.63 |
| 46-65 | 10.4% | 6.9% | 1.57 |
| Total | 10% | 4.9% | 2.13 |

Although generally higher prevalence rates are found in women compared to men, the sex differences in the individual diagnostic categories are variable. It is not possible to conclude from the currently available data that a specific sex effect is present for every somatoform disorder. The following table (Table 2) shows general frequencies and sex-specific characteristics of individual somatoform disorders.

**Table 2 General and sex-specific frequencies of individual somatoform disorders. [Source: Kampfhammer, 2005].**

| Somatoform disorder | Frequency (general) | Sex differences |
|---|---|---|

| | | |
|---|---|---|
| **Somatization disorder** | Despite the frequent presence of multiple symptoms, the criteria for a somatization disorder are rarely fully met (prevalence significantly below 1 percent). [3] | According to DSM and ICD criteria, women with a sex ratio of up to 10-20 : 1 (w : m) are significantly more likely to be affected. [3]<br>If the diagnosis is confirmed, a similar pattern of symptoms with similar coexistent psychopathology seems to be present in both sexes. [4] |
| **Dissociative Disorder** | Rare disease: point prevalence < 0.5 percent. [5] | Women clearly outnumber men (especially in the inpatient setting) with a sex ratio of 5-10 : 1 (w : m). [6] In certain contexts (military service or following an accident at work) men are more likely to fall ill. [7] |
| **Hypochondria** | Extremely rare in the general population: 0.2 percent. [8]<br>Hypochondriac symptoms and health-related concerns significantly higher: 6 percent. [9]<br>Prevalences are rising in the primary medical sector: > 1 percent. [5] | No clear sex differences. [10] |
| **Body dysmorphic disorder** | In general population < 1 percent. [11]<br>Rates collected in dermatological and cosmetic surgery contexts indicate that the disorder may be numerically underestimated. [12] | No clear sex differences. [13] |
| **Somatoform pain disorder** | Lifetime prevalence: about 12 percent (TACOS study). [14] | No clear sex difference. [3] |
| **Somatomorphic autonomic disorder** | Conceptual difficulties in diagnosis make epidemiological assessment difficult. [15] | Probably predominantly women. [3] |

## Risk and protective factors

Somatization processes are influenced by many different factors. One-dimensional explanations for sex differences are therefore highly unlikely. Differences in the perception, interpretation and communication of bodily stimuli, in the tolerance of pain, in the development of disease or health concepts as well as the socialization of disease behavior, the association with anxiety and depression, the number of severe traumatizations and post-traumatic developments are discussed as possible factors. [3]

Table 3 presents possible causes for the more pronounced somatization in women compared to men in greater detail. These sex differences are still far from being able to be classified in comprehensive

models. [16]

**Table 3. Explanatory aspects of somatization processes in women.**

| Gender/sex-specific aspect | Explanation |
|---|---|
| **Pain perception** | Pain perception: in experimental studies, women show a lower threshold for perception and a lower pain tolerance in the presentation of pain stimuli compared to men. [17] |
| **Menstrual cycle** | During the luteal phase of the female cycle a higher sensitivity to pain can be observed. An association with GABA and opioid effects under fluctuating estrogen levels is discussed. [18] |
| **Body awareness & Perception** | Compared to men, women have a more pronounced body awareness and a higher degree of vigilance towards physical processes, which can then influence health awareness and disease behavior. Regarding their body perception, women show a stronger connection between internal-visceral cues with external situational aspects. [19] |
| **Illness-related behavior** | The development of disease concepts and disease behavior is based on gender-specific socialization processes. In girls, for example, the learned behavior of dealing with topics such as self-communication can encourage later medical contact. At the same time, this behavior of seeking help can also promote further sensitization to physical processes. [20] |
| **Affective and anxiety disorders** | Women are much more likely to suffer from depression and/or anxiety disorders. This fact can then directly and indirectly promote somatization processes: somatization syndromes are often an integral symptom of affective or anxiety disorders. Anxiety and depression can also determine the chronification and severity of somatization disorders. [21] |
| **Trauma** | Empirical studies justify the hypothesis that traumatic experiences can play an important role in the development of somatization disorders. This correlation is significantly more frequent in girls and women than in boys and men. Both early and current traumatization experiences can significantly influence the cognitive-affective assessment of physical sensations and promote a (pathological) somatic-medical seeking for help.<br>The current study situation allows the conclusion that the more severe an early traumatization is, the greater the risk of suffering from a severe, often chronic depressive disorder with pronounced suicidal tendencies and multiple somatization syndromes (especially pain syndromes) as early as adolescence or young adulthood. Altogether, a poor psycho-biological and psychosocial status can often be observed. [22] [23] [24] |

# Pathophysiology

# Clinical presentation

## Symptoms

If one looks at the complaints that motivate a patient to contact a physician, there seem to be more similarities than differences between the sexes. Jackson et al (2003) found that patients report comparable symptoms and seek medical help after a similar period of time. There are also no sex differences in the duration of the symptoms, the subjective severity of the physical impairment or the perceived loss of function. However, compared to male patients, female patients more frequently report psychosocial stress situations and a higher symptom-related degree of suffering, and more often exhibit comorbid mental disorders. [25]

In the following (table 4) the body dysmorphic disorder as well as the pain disorder is dealt with more concretely. Here (in contrast to the other somatoform disorders) sex differences arise in the symptomatology.

**Table 4 Sex differences in the symptomatology of body dysmorphic disorder and pain disorder. [Source: Kampfhammer, 2005]**

| Somatoform disorder | Sex difference |
|---|---|
| **Body dysmorphic disorder** | Patients with a body dysmorphic disorder have the overwhelming belief that a body part is disfigured, although objectively this is not the case. The feeling of being ugly and therefore being ridiculed by others causes extreme suffering. Due to socio-cultural factors, men and women usually apply this conviction to different parts of the body. Women tend to express their body dysmorphic sensations in terms of lips, face, breasts, hips and weight. Men focus more often on their genitals, their muscles or their hair. [26] For example, body dysmorphic suffering in men (with the belief of muscular inadequacy) can be hidden behind excessive body building (body dysmorphia). [27] In general, body dysmorphic disorders in women seem to end more often in surgical modification, but epochal trends are leading to a convergence of men and women with regard to the decision for plastic-cosmetic procedures. [3] |

| | |
|---|---|
| **Persistent somatoform pain disorder** | A prominent (either localized or generalized) pain syndrome that persists for at least six months without a (sufficient) organic correlate determines the symptoms of persistent somatoform pain disorder. Fibromyalgia, persistent abdominal pain and tension headaches clearly dominate in women. Important (and possibly more significant) sex differences also show the somatization processes underlying a pain disorder: For example, women show a lower perception threshold and pain tolerance than men in the presentation of pain stimuli. [3] |

## Diagnostics

In primary care, the general practitioner can play a key role in raising awareness of somatization symptoms, but also of anxiety and depression. Basic psychiatric knowledge as well as the use of simple screening instruments can be important variables for change. [28] Particularly in women with recurrent psychosomatic complaints, there is a high correlation to depression and/or anxiety disorders, which must be identified. [3]

# Patient management

## Therapy

Therapeutic treatments should be multimodal. Although the fundamental importance of sex and sexuality is recognized, a gender-sensitive dimension has not yet been given sufficient consideration in previous therapy studies. [3]

## Physician-patient interaction

In the case of psychological, but also somatic illnesses, specialist care is not sex neutral. It is not only the sex of the patient that influences the care process. It can also be relevant whether the respective specialist staff is female or male. For example, male family physicians and internists generally prescribe psychotropic drugs, sedatives and analgesics more often and in higher doses than their female colleagues (and female patients are prescribed these more often than male patients). [29] [30] Health complaints in women are also more often classified as psychosomatic than is the case in male patients. [31] For details on this topic, see Sex and gender of the medical staff .

Moreover, male and female patients communicate differently and present or explain their symptoms in different ways (or fail to do so). For example, men are more inclined than women to deny psychological problems or to try to find their own solutions. Women, on the other hand, report

health problems of various kinds earlier and more frequently. [32] There also appears to be a sex difference in the way they cope with problems (health-related and others). This results in divergent behavioral patterns with regard to seeking and receiving professional help.

The sex-specific communication patterns and the more frequent description of symptoms on the part of women also seem to contribute to the fact that epidemiological studies show that women in general are more frequently diagnosed with somatoform disorders or functional syndromes such as fibromyalgia, irritable bowel syndrome or chronic fatigue syndrome. [33]

## Treatment outcome

## Psychosocial factors

The development of disease concepts and disease related behavior is based on gender-specific socialization processes. In girls, for example, the ability to deal with topics such as self-communication can make it easier for them to establish (later) medical contact. At the same time, this behavior of seeking help can also promote further sensitization to physical processes. [20]

Empirical studies also justify the hypothesis that traumatic experiences can play an important role in the development of somatization disorders. This correlation is significantly more frequent in girls and women than in boys and men. Both early and present traumatic experiences can significantly influence the cognitive-affective assessment of physical sensations and promote a (pathological) somatic-medical search for help. The current study situation allows the conclusion that the more severe an early traumatic experience is, the greater the risk of suffering from a severe, often chronic depressive disorder with pronounced suicidal tendencies and multiple somatization syndromes (especially pain syndromes) already in adolescence or young adulthood. Overall, a poor psycho-biological and psychosocial status is often observed. [22] [23] [24]

## Prevention

# Translation into patient care

# Open research questions

# Outlook

# External Links

# Literature

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