# SOCIAL PHOBIA: EPIDEMIOLOGY AND HEALTH CARE

# EPIDEMIOLOGIE UND VERSORGUNG DER SOZIALPHOBIE

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#### SUMMARY

This paper gives an overview on the epidemiology of social phobia. About 4.5% of the adult general populations suffer from social phobia, i.e. it is the most frequent of all anxiety disorders. Social phobia is clearly more frequent among women than among men. About the half of all individuals with social phobia suffer from any comorbid mental disorders. Reviews show a large variability between single studies, probably due to methodological differences. Several population surveys indicate that a marked proportion of those with social phobia do not receive adequate treatment.

*Key words:* social phobia – epidemiology – prevalence – incidence - psychiatric health care

#### ZUSAMMENFASSUNG

Diese Publikation gibt eine Übersicht über die Epidemiologie der Sozialphobie. Etwa 4,5% der Allgemeinbevölkerung leidern unter Sozialphobie. Insofern ist sie die häufigste Angststörung. Sozialphobie kommt bei Frauen deutlich häufiger als bei Männern vor. Etwa die Hälfte aller Personen mit Sozialphobie leidern auch unter einer anderen psychischen Erkrankung. Übersichtsarbeiten haben gezeigt, dass die Ergebnisse zwischen den einzelnen Studien deutlich differieren, was vermutlich in einem beträchtlichen Ausmaß mit methodischen Unterschieden zwischen den Studien zu tun hat. Eine Reihe bevölkerungsbezogener Studien berichtet, dass ein relevanter Anteil der an Sozialphobie Erkrankten nicht die erforderlichen Behandlungen erhält.

**Schlüsselwörter:** Sozialphobie – Epidemiologie – Prävalenz – Inzidenz - Psychiatrische Versorgung

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#### **INTRODUCTION**

Phobias are a subgroup of anxiety disorders, i.e. psychological and physical symptoms of anxiety are the core symptoms. A phobia is an irrational fear of specific objection, situations, activities or locations. The fear in phobias is excessive and disproportionate to any real danger or threat. DSM-IV lists three different types of phobias: agoraphobia, social phobia and specific phobias.

Agoraphobia means that a person feels uncomfortable in shops, specific rooms, vehicles or in other rooms, but in many cases their main fear is to be separated from their source of security. Agoraphobia is frequently associated with panic attacks, and agoraphobic patients often fear having a panic attack in the public and not bearing near to their physician or their medication.

Specific phobias usually involve specific objects or animals which cause disproportionate fear, such as snakes, spiders, dogs, blood, heights, thunderstorms or sharp items such as knifes.

Social phobia means that persons fear situations in which other persons might observe them. Usually, these persons fear speaking in the public, writing on a blackboard or eating in restaurants. Sometimes they avoid nearly all situations where they meet other persons (i.e. "generalized social phobia").

The Fourth Edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association 1994) defines social phobia as follows:

- A. A marked and persistent fear of one or more social or performance situations in which the person is exposed to unfamiliar people or possible scrutiny by others. The person fears that he or she will behave in way (or show anxiety symptoms) that will be humiliating or embarrassing.
- B. Exposure to the feared social situation almost invariably provokes anxiety, which my take the form of situationally bound panic attacks.
- C. The person recognizes that the fear is excessive or unreasonable.
- D. The feared social or performance situations are avoided or else are endured with intense anxiety or distress.
- E. The avoidance, anxious anticipation or distress in the feared social or performance situations interferes significantly with the persons normal routine, occupational functioning, or social

activities or relationships, or there is marked distress in having the phobia.

- F. In individual under the age of 18 years, the duration is at least 6 months.
- G. The fear of avoidance is not due to the direct physiological effects of a substance or a general medical condition and is not better accounted for by another mental disorder.
- H. If a general medical condition or another mental disorder is present, the fear in criterion A is unrelated to it.

#### PREVALENCE

A recent review of 1-year-prevalence of several psychiatric disorders (Figure 1) shows that social phobia is the most frequent subtype of all anxiety disorders (i.e. generalized anxiety disorder, =OCD), agoraphobia, panic disorders). Nevertheless, depressive disorders (6.9%) and somatoform disorders (6.3%) occur within one year much more often than social phobia (2.3%).

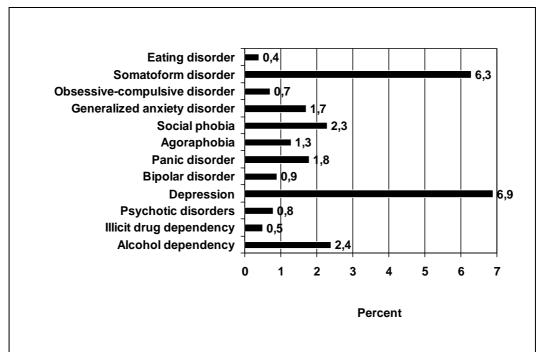


Figure 1. Median 1-year-prevalence (%) of mental disorders in Europe across 21 studies (Wittchen et al. 2005)

Some years ago, Fehm et al. (2005) published a review of epidemiological studies on the prevalence and incidence of social phobia in Europe, with the focus on studies using DSM-III-R or DSM-IV definitions. They found nearly twenty cross-sectional prevalence studies performed in the community published between 1989 and 2005. They reported a median 12-month-prevelance of 2.0% (range between 0.6 and 5.2%. Somers et al. (2006) performing a worldwide systematic review of epidemiological studies on social phobia reported a median 12-month-prevelance of 4.5% (Table 1). For general hospitals and nursing homes (Wancata et al. 1996, Wancata et al. 1998, Wancata et al. 2001), only one-month prevalence estimates for all anxiety disorders have been reported (2.1% in general hospitals and 1.9% in nursing homes).

Table	1.	Selected	prevalence	studies	of	social
phobia	(%;	based on	Somers et a	1. 2006)		

Authors	Country	1-year- prevalence
Henderson et al. 2000	Australia	2.7
Bijl et al. 1998	Netherlands	4.8
Offord et al. 1996	Canada	6.7
Kessler et al. 1994	USA	7.9
Oakley-Brown et al. 1989	New Zealand	2.8
Stein et al. 2000	Canada	7.2
Lepine & Lellouch 1995	France	2.3
Best estimate		4.5
(95% Confidence interval)		(3.0-6.4)

Nearly all studies published worldwide reported higher prevalence estimates for women than for men (Somers et al. 2006). Jacobi et al. (2002, 2004) found that prevalence was higher for women than for men in all investigated age groups (Table 2). Further, he showed that prevalence was highest among the youngest age group.

**Table 2.** 12-month-prevelance (%) of social phobia in the community according to age and sex in Germany (Jacobi et al. 2002, 2004)

	Women	Men
Total	2.7	1.3
18–34	3.1	1.9
35–49	2.7	0.7
50-65	2.2	1.4

Estimates of life-time prevalence show an extreme degree of variation. For example, Somers et al. (2006) reported 30-fold differences between studies even after excluding outliers. Such extreme differences raise serious concerns about the validity of life-time estimates.

Unfortunately, most surveys included only persons below the age of 65 years. Only one study (Ritchie et al. 2004) reported that 1.2% of the elderly population (men 0.9%, women 1.5%) suffered currently from social phobia and that overall 6.0% had suffered from this disorder at any time of their life.

## INCIDENCE

Overall, there is a lack of incidence studies. Somers et al. (2006) reported that only five studies worldwide had investigated the incidence of any of all anxiety disorders. In Europe, Fehm et al. (2005) found only one study providing incidence data for social phobia (Lieb et al. 2000), but several studies reported that in most cases the age of onset is between 12 and 17 years, and that onset after the age of 25 seems to be rare (Wittchen et al. 1999). Many studies report that social phobia frequently shows a duration of more than 10 years (Perugi et al. 1990), which indicates that social phobia is rather a chronic condition.

# COMORBIDITY

Comorbidity of social phobia with other mental disorders is common (Keller 2003). A recently published large multinational general population survey (Alonso et al. 2004) reported that about the half of those with social phobia suffer from any comorbid mental disorders (when not applying the exclusion criterion G of diagnostic criteria according to DSM-IV). Social phobia showed the strongest association with agoraphobia (odds ratio 21.6), generalized anxiety disorder (odds ratio 13.5) and panic disorder (odds ratio 11.6; see table 3).

**Table 3.** Associations (odds ratio) between social phobia and other 12-month mental disorders in the general population of European countries (Alonso et al. 2004)

0.11
Odds ratio
10.2
5.4
13.5
9.7
21.6
11.6
2.7
2.7

### **REASONS FOR HETEROGENEITY OF EPIDEMIOLOGICAL ESTIMATES**

It seems that the studies mentioned above show a considerable degree of variation in terms of prevalence estimates. When interpreting the results the composition of the sample must be considered. For example, it has been shown that younger adults and females show higher rates of social phobia (Table 2). Thus, studies including predominantly younger people and more females will report higher estimates.

Early studies (i.e. before 1990) based on DSM-III criteria reported lower rates as compared to studies based on DSM-III-R and DSM-IV criteria. It is essential to consider that the diagnostic criteria changed profoundly between DSM-III and DSM-III-R, while these changes were only marginal when introducing DSM-IV (Fehm et al. 2005). Beside symptoms, DSM requires for social phobia the presence of the symptoms interferes significantly with the persons normal routine, occupational functioning, or social activities or relationships (diagnostic criterion E according to DSM-IV). Unfortunately, there are no clear and objective cut-off points for establishing when social anxiety becomes a clinically significant disorder, and the threshold selected varies across epidemiological surveys. Using a rather broad definition of impairment must result in a higher prevalence as compared to studies using a rather narrow definition (Wittchen & Fehm 2003, Somers et al. 2006).

Review papers have indicated that in Asian countries social phobia is less common than in

Europe or Northern America (Wittchen & Fehm 2003, Somers et al. 2006). Until now, it remains unclear whether this difference is true or is affected by differing diagnostic constructs or is due to problems with cross-cultural validity. For other subtypes of anxiety disorders, Somers et al. (2006) have shown that surveys using lay interviewers for data collection report significantly higher rates than studies using psychiatric experts. But, it is not known if this is also true for social phobia.

## HEALTH CARE

As part of a Finish survey (Shivo et al. 2006), participants were asked if they had used health services for mental health reasons during the preceding 12 months, and 88.2% of those with social phobia reported as having been in contact with any health services. It seems interesting that only 46.2% had used specialised mental health care services (including municipal psychiatric outpatient clinics, mental health centres, private psychiatrists and psychiatric hospitals) while the others had used any other health services (e.g. general practitioner). Of those being in contact with specialised mental health care services, 31.4% were treated with psychotropic drugs alone, 7.6% by any psychological/psychotherapeutic interventions alone, and 57.0% received a combination of psychotropic drugs and psychological/psychotherapeutic interventions. Only 3.9% received neither psychotropics nor psychological/psychotherapeutic interventions. This is in agreement with the study of Wittchen (2000) who reported that 39% of those needing psychiatric specialist services did not receive these (according to the subjective views of respondents). Nevertheless, it seems that persons with social phobia have a marked delay in getting treatment as compared those suffering from panic disorder or generalized anxiety disorders (Bruffaerts et al. 2007). This agrees with the fact that more than two thirds of those with any anxiety disorders are not recognized by their physicians (Wancata et al. 2000).

### CONCLUSIONS

Social phobia occurs rather frequently. Studies report that roughly spoken between one out 20 and one out of 50 people suffer from it within one year. Consistently, younger adults and females suffer more often from social phobia than older adults and males. Unfortunately, studies about prevalence among the elderly population and concerning incidence are scarce. As discussed above it seems that methodological reasons may be largely responsible for differences in prevalence rates across studies. It might be that better definitions of social consequences improve the comparability of results (Wittchen & Fehm 2003). Reports about life-time prevalence show an extreme degree of variation which raises serious concerns about their usefulness.

Social phobia very frequently co-occurs with other anxiety disorders such as agoraphobia or generalized anxiety disorder. It seems to be essential to consider this aspect when treating persons with social phobia. In general, guidelines consider the use of cognitive behaviour therapy and/or pharmacotherapy as equally effective treatments (Shivo et al. 2006, Kapfhammer 2008). The fact that many persons with social phobia do not receive adequate treatment is worrisome and alarming. Studies investigating the reasons for these unmet needs on a population level are essential (Meise et al. 2008, Wancata et al. 2000).

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