

The prevalence of social phobia in a representative group of adolescents from Łódź

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Summary

In cooperation with GUS we assessed the prevalence of specific and generalized type of social phobia in a representative group of adolescents population extracted from the city of Łódź. We found, that generalized social phobia was present in 7% of the subjects. A specific type constituted 17% of subjects. 15% of adolescents with social phobia were alcohol or psychoactive drug abusers, 5% had attempted suicide. Only 1/4th of adolescents with social phobia were involved in psychological or psychiatric treatment.*

*GUS – Main statistical office

Key words: adolescent, social phobia, prevalence

The majority of studies conducted since the 1960's imply that the prevalence rates of social phobia is dependent on the characteristics of the studied population (age, social background, education, cultural environment) and on the diagnostic criteria applied. The obtained results are most often in the broad section from 0.4 or higher, and at times even as high as 22.6% [1, 2] – see table 1. Numerical data recently published is even higher, which may be a result of a wider awareness of the researchers, application of proper diagnostic criteria, and perhaps a significant increase of social phobia and symptom occurrence, especially in the population of young people [3, 4, 5, 6, 7].

The European studies, carried out during the last decade, show that the disorder exists in 9.6 to 16% of the general population. It was also ascertained that 95% of social phobias begin prior to the age of 20, however in 40% of the cases the onset is before the age of 10 [8, 9, 10, 11]. Most of the research indicates that the average age of social phobic symptoms occurrence is between 14 and 20 years of age [8, 9, 10, 11, 12, 13, 14].

Social phobia appears more often in women than in men, especially in non-clinical

Table 1

Prevalence of social phobia /100 studied [2]
 ECA – Epidemiological Catchment Area
 NCS – National Comorbidity Survey

Country	M	F	All together
USA (ECA)	2.1	3.1	2.6
Edmonton, Canada	1.3	2.1	1.7
Puerto Rico	0.8	1.1	1.0
Korea	0.1	1.0	0.5
USA (NCS)	11.1	15.5	13.3

trials. In the respect, women constitute about 60–70% of patients diagnosed [5, 10]. Most often the diagnosis is given to individuals having a lower educational level, or being from lower socio-economic classes.

Social phobia is diagnosed if the anxiety (and all of its psychological, behavioral, and autonomic components) occurs in reaction to the opinion of others. A discredit of oneself - appears in every social situation outside a familial circle, while specific social phobia is diagnosed when the symptoms listed above appear in particular situations, i.e. during a public presentation, eating in public, contacts with authority, opposite sex, etc.

In a significant number of cases with this diagnosis there is a co-morbidity of other phobias (simple phobia, agoraphobia) and also major depression, addiction to alcohol or other psychoactive substances, panic disorder, obsessive-compulsive disorder and eating disorders [15] – see table 2.

A considerable percentage of people with this diagnosis function badly in social

Table 2

Risk of occurrence of other psychic disturbances in the persons
 with a diagnosis of social phobia. According to the studies
 conducted among 123 patients with diagnosis of social phobia [9].

Psychic disturbances	Risk of occurrence (%)
Schizophrenia /schizophreniform disorder	13.3
Simple phobia	60.8
Agoraphobia	45.0
Generalized anxiety	26.9
Obsessive-compulsive disorder	18.6
Panic disorder	11.6
Posttraumatic stress disorders	5.4
Mania	1.5
Major depression	14.6
Alcohol dependence/abuse	17.2
Suicidal attempts	12.1
Neurological disorders	1.9
Chronic peptic ulcer disease	9.0

circumstances, especially when other mental disorders coexist.

The results of genetic, neuroendocrinological, and CNS-imagery investigations show significant differences between those with a diagnosis of social phobia and healthy persons, as well as differences in a range of various social phobia subtypes (general and specific subtype). The mechanisms responsible for symptom formation of this disorder are still unclear. The results of the studies suggest a participation of disturbances in the serotonergic as well as dopaminergic and noradrenergic systems [16-20]. It seems that genetic and environmental factors are also important in symptom formation [7, 9, 11, 12, 15, 16, 21, 22, 23, 24, 25, 26, 27].

In summary, it may be said that the patients diagnosed as suffering from social phobia compose a group of people with a high risk of chronic mental disorder, coexistence of other additional psychic disorders with distinctly poor social functioning, who usually require many-years of specialist care, often become disabled. All this implies high economic costs. Early detection of those disorders and adequate treatment may cause good therapeutic, social, and economic effects.

Aim

The aim of this study was to estimate the prevalence of social phobia among high school youths and technical schools in the city of Łódź. In addition, it was intended to ascertain the frequency of suicidal behavior, alcohol abuse, and the use of other psychoactive substances among individuals suffering from anxiety disorders.

Material and method

In 2001 in cooperation with GUS - the Main Statistical Office in Łódź, an inquiry study of the prevalence of symptoms of social phobia symptom prevalence among a representative group of youth from national secondary schools were carried out. In the inquiry, the ICD-10 the criteria for a diagnosis of social phobia was applied and the Composite International Diagnostic Interview - CIDI was used.

The randomization scheme of the group

1. The study group was split into 3 sections: regular high schools students, technical high school students, and students from occupational schools. The random probability in particular groups was different (see point 3).
2. A two-step scheme of randomization was applied; the schools were drawn first. Each group was then subsequently drawn – one class from every level of education from each of the schools.
3. The approximate final extent of the trial was determined by financial and organizational conditions of the researchers, and was designated for 1600-1800 students. According to the average number of students in a school and the average number of classes at schools - the number of schools to be chosen was determined (24).
4. In the first randomization, the modified optimal Neyman allocation was applied

to choose the number of students in each group. As there was no information on the variance of the variables studied, it was required for the results' precision (measured as a relation of the standard random error to the mean) to be equal in the same fractions of the given groups. This kind of a measurement is rather approximate, primarily due to the fact that the mean number of students in schools with different profiles varies.

5. On this basis, the following schools were chosen:
 - regular high schools – 9 (of 44)
 - technical high schools – 8 (of 55)
 - occupational schools – 7 (of 17).
6. Schools of particular profiles were chosen in consideration to their size.
7. In the second stage a simple random trial was applied.

Results

Three schools (one of every studied group profile) refused participation in the study. Therefore the finalists included 8 regular high schools, 7 technical high schools, and 6 occupational schools that participated in the study. Refusals of participation in the inquiry at the second stage occurred sporadically (individual cases were noted). Ultimately, 1629 people representing 38450 students – the entire population – was studied (21769 in high schools, 13074 in technical high schools, and 3607 in occupational schools).

Data analysis

The quality of the questionnaires that were completed was usually high; however incidents of avoiding certain questions or logic inconsistency occurred. When there was logic inconsistency, manual analysis was applied (i.e. in a situation when the individual in question, who had a suicidal attempt in the past, notes that he/she didn't - it was considered that the person's answer was a mistake). When the subjects avoided answering questions, data was inserted by random selection from the answers of other persons having similar personal characteristics. In every case identical demographic characteristics were considered (age, sex) and individual characteristics of the spectrum of the study topic were chosen. The number of computations for particular gaps of the questionnaire fluctuated between 95 and 25, on average – 27.3, SD 5.3.

Results

Considering the randomization scheme applied (with various probabilities of choice) the study wasn't automatically balanced, thus the proportions in the study may differ from those existing in the entire population. Owing to this, all of the indicators of structure or relations of variables had to be estimated exclusively for the variables generalized from the entire population of secondary schools.

Each result had its precision evaluated (shown here in percentages). We assumed that the relative estimation error of higher than 40% indicates an insufficient credibility

for estimation, (i.e. the value should not be analyzed).¹ This situation did not come about in all of the analyzed data.

The indicators of precision should be interpreted in such a manner that the estimations which have the lowest indicators are the most reliable. For the analyzed data, precision indicators were in the interval: 1–15%.

To estimate the significance of the differences, a t-Student test was applied.

Results and discussion

It should be emphasized that final diagnosis of social phobia was made only on the grounds of the questionnaire data analysis. The inquiry was anonymous and there was no possibility to verify the data in a direct examination of the participants who fulfilled the criteria of that diagnosis.

Of the 1629 studied 277, (17%) felt intense anxiety or shame almost everyday, during contacts with strangers – authorities or opposite sex, for at least 6 months and they had all the symptoms allowing for a diagnosis of specific social phobia and according to them, they functioned worse in a school or in a peer group. In approximately 7% of those studied, all of the symptoms of social phobia lasted longer than 6 months, appeared in every social situation and (in their opinion) seriously disturbed their functioning (statistically significant higher rate in women, equally often among students of high, technical and occupational schools). Generally, in the period when the study was being carried out, 24.0% of those studied had symptoms of social phobia (see table 3). These rates are the highest obtained in the studies carried out until now [2]. It is also surprising that the symptoms had been appearing with the same frequency in students attending schools with a higher and lower educational level. It seems that in at least some of those studied with a diagnosis of social phobia, being anxious about social opinion or public presentation originated not from a lack of ability or knowledge but probably from low self-esteem, uncertainty, excessive need-fulfillment, tendencies to persistently compare oneself and an expectation “to be the best”.

Discussion

Table 3

Prevalence of specific and general social phobia

Subtype of social phobia	L	%(M/F)	Statistical significance
Specific	277	17.0 (26.0 / 7.0)	p=0.05
General	115	7.0 (12.0 / 2.0)	p=0.05
Altogether	392	24.0 (38.0 / 9.0)	p=0.05

The high percentage of adolescents with social phobia, found in this study, is still within the higher values of the range, presented by many authors. This result is probably, among other factors, due to a large percentage of non-generalized social phobia diagnoses, mainly the fear of judgment by an authority figure. It seems, that this phenomenon is mainly connected with the functioning of the Polish school, especially the

¹ This happens usually when the number of cases in a particular sample is very low, which means that the data refers to sporadic phenomena.

manner of evaluating students' performance, negative comparisons to others, inducing and encouraging "unhealthy" competition. Of significance is also the specific time that Poland is undergoing right now: the time of social, economic and cultural transformation, influencing the change of values, bringing about the threat of unemployment, "the rat race", fear of the future, the constant fear, especially among the secondary school students, of "not being good enough" in order to get a good job, have a career, find one's place in life. From our research it becomes obvious, that this very group of better-educated, secondary school adolescents, much more often, than their vocational school counterparts, is suffering from the symptoms of social phobia.

The transformation period also influenced many changes within the family system: less and less time is being spent with children, more rarely are they provided with the support they need to build their feeling of self-worth and self-appreciation, receiving instead comparisons to "better" peers, as a way of motivating. Finally, in many families examples abound, how difficult adult life really is, how easily one can become obsolete, both in the professional, and in the social sense.

Only a small percentage of adolescents seeks professional help – in scarce Child and Adolescent Psychiatry facilities, Psychological Aid Centers for adolescents, or private psychiatric/psychological practices. And that only occurs when the intensity of fear significantly disturbs the young person's functioning (in the form of lowered school performance, restriction, or full withdrawal from social contacts), or depressive symptoms add on. This situation is due to low knowledge of adolescents, and their care-givers (parents, teachers) about these disorders, the possibilities of acquiring help, as well as difficult access to such professional help.

Over 15% of those individuals systematically abused alcohol and used psychoactive substances (marijuana, amphetamine, tranquilizers). It was difficult to estimate how many of them fulfilled criteria for substance-dependence.

Relations between social phobia and alcohol addiction have been well known for quite some time. It is considered that patients experiencing an anxiety disorder have "alcohol problems" twice as often as those compared to the general population, and that those with alcohol dependence suffer from social phobia nine times more often than the general population [15].

In the group with social phobia, approximately 5% had past suicide attempts, 28% declared thoughts of dying, almost 10% of them had relatives who had successfully committed suicide. In comparison to the result of the other studies, a relatively high percentage of people with the diagnosis of social phobia, who attempted suicide, were found (see table 4).

Unfortunately, on the basis of the information obtained it was impossible to estimate how many of those studied had additional psychic disturbances (e.g. depressive disorder).
Table 4
Suicidal behaviors in people with diagnosis of social phobia [1]

Suicidal behaviors	Social phobia Individuals (%)	Social phobia + other diagnoses (%)
Suicide attempts	0.9	15.7
Obsessive thoughts about death	20.9	53.8

ders). Only ¼th of the group maintained contact with a psychiatrist or psychotherapist – this may suggest that both the students and their parents have a poor knowledge of this anxiety disorder and on the possibilities of treatment. Another explanation is the probable existence (in the opinion of those studied) of similar symptoms in one of the parents. This was noted by approximately 15% of those with a diagnosis of social phobia. Perhaps they devaluated the essence of their children's symptoms. We may also consider the communication between the family members and their awareness of each other, however currently it is difficult to explain this phenomenon on the basis of the studies carried out until now.

Conclusions:

1. On the basis of the questionnaire study it was ascertained that approximately ¼th of the studied adolescents note symptoms of specific (17.0%) and general social phobia (7.0%).
2. All those studied who had a diagnosis of social phobia, according to them, functioned much below their abilities.
3. Psychoeducation on the diagnosis, course, prognosis and treatment of social phobia as well as more precise studies of the causes of such a high prevalence of this disorder are necessary.

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