

Social Phobia Among Patients Attending the Outpatient Clinics of Buraydah Mental Health Hospital, Al-Gassim, KSA

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ABSTRACT

Introduction:	Social phobia is a prevalent disorder among psychiatric outpatient clinics patients.
Aim of the Study:	To investigate the prevalence, demographic and clinical characteristics, avoidant personality disorder and personality dimensions, co-morbidity of depressive disorders, quality of life and disability of social phobia among Saudi patients.
Subjects and Methods:	We screened patients attending Buraydah Mental Health Hospital, outpatient clinics, Al-Gassim, Saudi Arabia, using Social Phobia Inventory. We examined rates of social phobia subtypes defined generalized and specific among patients. ICD-10 criteria were used to diagnose social phobia, depressive disorders and avoidant personality disorder. SF-36 and WHO/ DAS II were applied to assess quality of life (QOL) and disability. Thirty healthy subjects were selected under the study for comparison.
Results:	We found that one month prevalence of social phobia is 5.63% among the outpatient attendees. The disorder in our patients tends to be generalized subtype (95.35%). Depressive disorders were higher among patients than t control group (20.93% vs. 6.67%) with dysthymic disorder higher than major depression among social phobia patients (13.95% vs. 6.98%). Also, avoidant personality disorder was higher among patients than control group (9.30% vs. 3.33%). Patients with social phobia have a high level of neuroticism and a low level of extroversion with a marked disability and low QOL.
Conclusion:	Social phobia is a major mental health problem and is associated with marked disability and low QOL. The knowledge and skills of the clinicians must be improved regarding early detection and prevention of consequences.

Key words: Social phobia, Social anxiety disorder, Phobia, Anxiety disorders.

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INTRODUCTION

Social phobia (SP) is an anxiety disorder (also known as social anxiety disorder "SAD")¹. SP is characterized by the fear and/or avoidance of situations where an individual is subject to the scrutiny of others^{2,3}. Prior to the last decade, little attention had been specifically paid to social phobia in clinical, therapeutic and epidemiological studies. SP was not disentangled from the broad category of phobic neurosis until the DSM-III classification in which agoraphobia, social phobia and simple phobia were individualized³. Social phobia may be discrete (Specific; SSP) (i.e. restricted to eating in public, to public speaking or to encounters with the opposite sex) or diffuse (Generalized; GSP), (involving almost all social situations outside the family circle)². GSP may characterize a familial form of the disorder⁴⁻⁶. Among those with DSM-IV social phobia (7.2%) are classified as SSP⁷ and its characteristics must be seen as similar to those of specific phobias.⁶⁻⁸

Social phobia is a prevalent disorder with its onset almost universally in childhood or adolescence^{6,9-11}. Social phobia is the most common anxiety disorder, with reported prevalence rates of up to 18.7%¹². Although social phobia used to be considered fairly uncommon, epidemiologic surveys¹³⁻¹⁶, have placed the 12-month prevalence of social phobia in the range of 7-8%, a rate several fold higher than that determined by earlier studies^{17,18}. In a community study of adolescents and young adults, a lifetime prevalence of DSM-IV SP of 9.5% in females and 4.9% in males^{15,17-19}. Several epidemiological studies have attempted to describe the prevalence; they found that lifetime prevalence ranges from 2.4% to 16%^{17,20-22}. The overall prevalence of mental disorders among adolescent school age Saudi boys and girls amounted to 15.5%. The most frequent mental symptoms were phobic anxiety (17.3%)²³. Also, Al Gelban²⁴, found that the most prevalent mental symptoms in the 545 Saudi female students,

were phobic anxiety (16.4%). These rate differences were partly attributed to probable genetic or cultural factors²⁵. Furthermore, major methodological differences (type of diagnostic criteria used, assessment tools and age of the sample) affecting the estimates have been demonstrated²⁶. Social phobia is the third most common mental disorder in adults worldwide, with a lifetime prevalence of at least 5% with a female preponderance of 3:2 in catchment area surveys.^{20,27-29}

Personality disorder and personality abnormality are significantly higher in neurotic patients than in controls and need to be considered in diagnostic assessment. Some comorbidity was shown between avoidant personality disorder and phobia³⁰. In fact, lifetime co-morbidity with other disorders, such as major depression, is the rule rather than the exception among patients with social phobia^{1,6,12,31-33}. Out of 80 Saudi males with social phobia; 55% and 34% of the patients were mild-moderately and significantly depressed, respectively³⁴. Depression is common among Saudi patients with social anxiety disorder (SAD), particularly the severe subtype, 41% of the patients with SAD had depression and 37 (92.5%) of them had it after SAD onset. The results of family and twin studies reveal that shared etiologic factors explain a substantial proportion of the co-morbidity between social phobia and depression as approximately 20% of subjects with social phobia in the community meet lifetime criteria for a major depressive disorder³⁵. When co-morbidity does occur, SP almost always starts first, often many years prior to the onset of depression³⁵⁻³⁹. Furthermore, the association between early-onset anxiety and depression in young adulthood is evident when looking at family patterns of transmission in depressive high-risk families^{40,41}. These observations have sparked interest in the possibility that early identification and intervention with socially anxious children or adolescents, especially severe subtype, might reduce their risk for depressive disorders in later life.^{12,19,39-42}

The onset of social phobia typically occurs in childhood or adolescence and the clinical course, if left untreated, is usually chronic, unremitting and associated with significant functional impairment¹². From an epidemiologic perspective, it has been more difficult to ascertain the extent of functional impairment associated with social phobia. In large part, this is because the premier contemporary psychiatric epidemiologic surveys, including the Epidemiologic Catchment Area Study⁴³⁻⁴⁵ and the National Comorbidity Survey¹⁵, were not intended to assess disability to any great extent. Each of these studies has demonstrated particular adversities associated with social phobia (e.g., greater suicidal ideation and financial problems)^{16,32,33,46}. In clinical study groups, patients with social phobia, in addition to poor employment performance and reduced social interaction, reported more difficulties in school during adolescence^{47,48}. Functional impairment in social phobia has brought it to attention as an important public health concern^{9,49}. Prior studies have shown that comorbidity probably accounts for at least some of the impairment associated with social phobia in the community.^{17,18}

Moreover, quality of life was inversely related to the severity of social phobia. Antony and his colleagues⁵⁰, found that patients with social phobia reported substantial interference with their daily functioning in multiple domains. When compared indirectly to patients with a variety of other chronic physical illnesses, patients with social phobia demonstrated comparable or more severe perceived impairment. Safren and his colleagues⁴⁵, showed that these patients with social phobia perceived their quality of life to be relatively poor. A significant impairment was found on all measures of mental health and on the general health subscale of the short form (SF-36) in a non clinical population of persons with social phobia⁵¹. Co-morbid depression contributed moderately to the dysfunction in daily activities, interpersonal relationships, performance in school, educational attainment, dissatisfaction with a variety of life domains and poor quality of life associated with social phobia. Effective treatment improves the quality of life of patients with social phobia.^{6,45,52-54}

AIM OF THE STUDY

Our study aims to:

1. Determine the prevalence of social phobia among patients attending the outpatient clinics of a mental health hospital.
2. Examine the subtypes of social phobia; the generalized and specific subtypes.
3. Determine the prevalence of avoidant personality disorder and personality dimensions among patients with social phobia.
4. Focus on the most common co-morbid disorders (depressive disorders).
5. Examine the range of disability and the reduced quality of life associated with social phobia.

SUBJECTS AND METHODS

This study is a cross-sectional study of social phobia patients and a control group at least 18 years of age. All participants gave informed consent before they were enrolled in the study. Our study included two groups; the social phobia group and the control group. Forty three patients with social phobia (SP Group) out of 764 attendees of the outpatient clinic of Buraydah Mental Health Hospital, Al-Gassim, KSA, were enrolled in the study. Thirty comparison subjects (Control Group), who did not have social phobia, were selected for the study. Socio-demographic variables and additional information were obtained from medical records or through an additional interview. The SP group and the control group diagnosed as having psychosis, mental retardation, dementia or physical condition were excluded.

Diagnostic tools:

A. Social Phobia Inventory (SPIN): It consists of questions which evaluate fear (of people in authority, of parties and social events, of being criticized, of talking to strangers, of doing things when people are watching and of being embarrassed), avoidance (of talking to strangers, of speaking to people for fear of embarrassment, of going to parties, of being the centre of attention, of making speeches, of being criticized, of speaking to authority) and physiological discomfort (blushing, sweating, palpitations or shaking and trembling in front of other people). Each of the 17 items is rated on a scale from 0 to 4: not at all, a little bit, somewhat, very much and extremely; with higher scores corresponding to greater distress. The full-scale score thus ranges from 0 to 68. A total score of ≥ 19 suggests a diagnosis of social anxiety disorder (SP) which has to be confirmed clinically. This self-rated scale distinguishes between individuals with and without social phobia, validly measures severity of illness, is sensitive to the reduction in symptoms over time and discriminates between different treatments. Hopefully, the SPIN was found to be a useful contribution to the domain of screening for and treatment response in, social phobia⁵⁵. The Arabic version of SPIN was found to have excellent internal consistency and good test-retest reliability. A cut off score of 23 distinguished well between those with social phobia and without. It was reliable and valid for screening of the population.⁵⁶

B. A self report (yes or no checklist) was used to assess the 12 common chronic physical conditions: asthma, chronic bronchitis, anemia, high blood pressure, heart problems, arthritis, kidney disease, diabetes, cancer, stomach or duodenal ulcer, chronic gallbladder or liver problems and hernia.⁵⁷

C. A Semi Structured Psychiatric Interview was introduced to all patients.

D. International Classification of Mental and Behavioral Disorders (ICD-10) was used for the clinical psychiatric diagnosis; social phobia, depressive disorders and avoidant personality disorder.²

E. The Eysneck Personality Questionnaire Revised (EPQ-R): It was used for detection of personality dimensions⁵⁸. The EPQ-R-Saudi Form which was used in this study assesses four domains of normal personality as construed by the Four-Factor Model: neuroticism, extraversion, psychoticism and Lie. This revised form consists of 115 items; 27 items for neuroticism, 29 items for extraversion, 38 items for psychoticism and 21 items for lie. The Saudi Form was found to be reliable and valid in the Saudi population.⁵⁹

F. Beck Depression Inventory II (BDI-II): It is a series of questions developed to measure the intensity, severity and depth of depression in patients with psychiatric diagnoses. The long form of the BDI-II is composed of 21 questions or items, each with four possible responses. Each response is assigned a score ranging from zero to three, indicating

the severity of the symptom. The sum of all BDI-II item scores indicates the severity of depression. Scores from 0 to 9 represent minimal or no depressive symptoms, scores of 10 to 16 indicate mild depression, scores of 17 to 29 indicate moderate depression and scores of 30 to 63 indicate severe depression. All groups were screened for depression using the Beck Depression Inventory.⁶⁰

G. The SF-36: It is the most widely used instrument to assess health related quality of life and is suitable for social phobia⁶¹. It consists of eight domains (Physical Function, Role Function Physical, Role Function Emotional, Social Function, Mental Health, General Health, Vitality and Pain). The domain scores are rated so that higher values indicate better health (range 0–100). It is easy to understand and acceptable for the respondents and its reliability and validity is rather high. The SF-36 items are summarized in two weighted summary scales: mental component summary (MCS) and physical component summary (PCS).⁶²

H. The WHO/DAS II: Disability was measured with the World Health Organization Disability Assessment Schedule (version 2.0) (WHO/ DAS II). This instrument has been used for cross-cultural comparison of psychiatric disability after extensive field trials and studies in more than 20 countries. The (WHO/ DAS II) is a semi structured interview. The (WHO/ DAS II - INTERVIEWER-ADMINISTERED 36 item), is a new scale, proposed by the WHO, containing 36 items that enables the assessment of disability levels according to the International Classification of Functioning. This interview measures self-reported difficulty of functioning in six major domains that are considered important in most cultures: Domain 1 (D1): Understanding and communicating, domain 2 (D2): Getting around, domain 3 (D3): Self care, domain 4 (D4): Getting along with people, domain 5 (D5): Life activities and domain 6 (D6): Participation in society. The (WHO/ DAS II) total score goes from 0 = non-disable to 100=maximum disability.⁶³

Study Procedures:

All patients attended the outpatient clinic of Buraydah Mental Health Hospital, Al-Gassim, KSA, during Oct, 2009, were consented to participate in the study and they were screened by Social Phobia Inventory (SPIN) to determine the positive patients. The studied groups were assessed for socio-demographic variables, inclusion and exclusion criteria. Patients with social phobia and the control group were screened for depressive disorders and avoidant personality disorder using ICD-10 criteria, EPQ-R Saudi Form for personality dimensions and the Beck Depression Inventory. The SF-36 for quality of life and the WHO/ DAS II for measurement of disability were applied to social phobia patients and control group.

Data Analysis Demographic characteristics in SP patients and the control group were compared using chi-square tests for categorical data and t tests for continuous data. Chi-square with Yates's correction, Fisher's exact, Spearman's rank order correlation and Bonferroni correction were

applied where appropriate. The Statistical Package for the Social Sciences⁶⁴, was used to conduct analyses.

RESULTS

Out of 764 patients attended Buraydah Mental Health Hospital, Al-Gassim, KSA, 43 patients (5.63%) had SP by using SPIN and confirmed by ICD-10 criteria. As presented in (Table 1), 60.47% of the SP group in comparison with 36.67% of the control group was female. That is mean females outnumbered males regarding SP about 2:1 with (p value <0.01). There is no significant difference between the two groups regarding the mean age, marital status, education and socioeconomic status. Unemployment was significantly higher among SP group than the control group (44.19% vs. 20%, p value <0.05). Social phobia patients had significantly higher scores than control group regarding SPIN (31.65 ± 7.6 vs. 6.18 ± 2.3) with (p value <0.01) and BDI-II (8.14 ± 2.7 vs. 3.41 ± 1.1) with (p value <0.05).

Table 1: Demographic and Clinical Characteristics of Patients and Control Group.

Characteristics	SP Group (n= 43)	Control Group (n= 30)
Sex (n and %)		
Male	17 (39.53)	19 (63.33)
Female	26 (60.47)**	11 (36.67)
Age (Mean $\pm$ SD, years)	24.1 $\pm$ 9.7	28.7 $\pm$ 7.9
Marital Status (n and %)		
Married	20 (46.51)	16 (53.33)
Not Married	23 (53.49)	14 (46.67)
Education (n and %)		
< 12 years education	20 (46.51)	12 (40.00)
> 12 years education	23 (53.49)	18 (60.00)
Occupation (n and %)		
Employed	24 (55.81)	24 (80.00)
Non employed	19 (44.19)*	6 (20.00)
Socioeconomic Status (n and %)		
Low	10 (23.26)	7 (23.33)
Moderate	28 (65.12)	20 (66.67)
High	5 (11.62)	3 (10.00)
Social Phobia	n	n
	43/ 764	0/ 30
	5.63	0.00
SPIN Score	$31.65 \pm 7.6^{**}$	6.18 ± 2.3
BDI-II Score (mean$\pm$SD)	$8.14 \pm 2.7^*$	3.41 ± 1.1

* Means p value <0.05, ** means p value <0.01, GSP = Generalized Social Phobia, SSP = Specific Social Phobia, SPIN = Social Phobia Inventory, BDI-II = Beck Depression Inventory II.

Table 2, showed symptoms and subtypes of social phobia among patients. The most common symptoms regarding the performance situation were giving a speech or speaking in public (23.26%) then taking part or speaking in a meeting or class (20.93%) and the least was eating or drinking where someone could watch (4.65%). The most common symptoms regarding the interactional situation were talking to people because might sound foolish (20.93%) then dealing with authority figures (18.60%) and the least was returning items to a store or being introduced to a stranger (4.65%). Regarding the subtypes of social phobia, we found that the

generalized subtype was more common than the specific subtype (95.35% vs. 4.65%) with (p value <0.01).

Table 2: Symptoms and Subtypes of SP Among SP Patients.

Symptoms	SP Group (n= 43) (n and %)
Performance situations	
Giving a speech or speaking in public	10 (23.26)
Taking part or speaking in a meeting or class	9 (20.93)
Walking into a room when people are already seated	6 (13.95)
Using toilet away from home	5 (11.63)
Writing while someone watches	3 (6.98)
Eating or drinking where someone could watch	2 (4.65)
Interactional situations	
Talking to people because might sound foolish	9 (20.93)
Dealing with authority figures	8 (18.60)
Making eye contact	7 (16.28)
Going to a party or other social outing	4 (9.30)
Returning items to a store	2 (4.65)
Being introduced to a stranger	2 (4.65)
Social Phobia Subtypes (n and %)	
Generalized Subtype (GSP)	41 (95.35)
Specific Subtype (SSP)	2 (4.65)

As shown in (Table 3), Avoidant personality disorder is significantly higher among SP group (9.30%) than control group (3.33%) with (p value <0.05). Also, higher neuroticism and lower extroversion were associated with SP group (21.1 ± 5.7 and 3.3 ± 2.3) than control group (7.1 ± 5.4 and 8.3 ± 5.3) with (p values <0.01 and <0.05).

Table 3: Avoidant Personality Disorder and EPQ-R-Dimensions Among Studied Groups.

Avoidant Personality Disorder and EPQ Dimensions	SP Group (n= 43)	Control Group (n= 30)
Avoidant Personality Disorder (n and %)	4 (9.30)*	1 (3.33)
EPQ (mean $\pm$ SD)		
Neuroticism Scale	$21.1 \pm 5.7^{**}$	7.1 ± 5.4
Extraversion Scale	$3.3 \pm 2.3^*$	8.3 ± 5.3
Psychoticism Scale	6.1 ± 3.5	5.5 ± 3.7
Lie Scale	4.7 ± 4.3	3.9 ± 4.2

* Means p value <0.05, ** means p value <0.01

We found that depressive disorders are common comorbidity with social phobia as shown in (Table 4). Their prevalence was significantly higher among SP patients (20.93%) than control group (6.67%); Dysthymia was higher than major depression (13.95% vs. 6.98%) in SP patients. Major depression was only found among SP group (6.98%). Also, SP patients had significantly higher scores in BDI with mean score (8.14 ± 2.7) than control group (3.41 ± 1.1). Moderate and severe depression, were significantly higher in SP patients (6.98% and 4.65%, respectively) than the control group (0.00%).

Table 4: Comorbidity and Severity of Depressive Disorders Among Studied Groups.

Depressive Disorders and Beck Depression Inventory Score	SP Group (n= 43)	Control Group (n= 30)
Depressive Disorders (n and %)	9 (20.93)**	2 (6.67)
Dysthymia	6 (13.95)*	2 (6.67)
Major Depression	3 (6.98)	0 (0.00)
BDI-II Degree (n and %)		
Minimal or No Depression (0– 9)	34 (79.07)	28 (93.33)
Mild Depression (10 – 16)	4 (9.30)	2 (6.67)
Moderate Depression (17 –29)	3 (6.98)	0 (0.00)
Severe Depression (30 – 63)	2 (4.65)	0 (0.00)
BDI-II Score (mean ± SD)	8.14 ± 2.7*	3.41 ± 1.1

* Means p value <0.05, ** means p value <0.01, BDI-II = Beck Depression Inventory II.

Table 5, showed that quality of life was significantly lower among SP patients than control group regarding mental component summary (17.1 ± 6.3 vs. 32.7 ± 4.1), physical component summary (37.2 ± 6.4 vs. 48.4 ± 3.7) and total score (54.3 ± 5.7 vs. 81.1 ± 3.9).

Table 5: Quality of Life Among Studied Groups According To The SF-36.

Scores of The SF-36	SP Group (n= 43)	Control Group (n= 30)
SF-36 Scores		
Mental Component Summary (MCS)	$17.1 \pm 6.3^{**}$	32.7 ± 4.1
Physical Component Summary (PCS)	$37.2 \pm 6.4^{*}$	48.4 ± 3.7
Total Score of The SF-36	$54.3 \pm 5.7^{**}$	81.1 ± 3.9

* Means p value < 0.05 and ** means p value <0.01.

Table 6, showed that 25.48% of the SP patients had a degree of disability versus 3.33% of the control group but most of the functionally disable SP patients had mild (45.45%) to moderate (36.36%) degree. About 18% of the disable SP patients had severe disability. Also, SP patients had significantly higher score than the control group in the WHO/DAS II with mean (2.6 ± 1.1 vs. 0.9 ± 0.6).

Table 6: Disability Among Studied Groups According To The WHO/DAS II.

Degree and Score of Disability	SP Group (n= 43)	Control Group (n= 30)
No Disability (n and %)	32 (74.42)	29 (96.67)
Degree of Disability (n and %)		
Mild	5 (45.45)	1 (100.00)
Moderate	4 (36.36)	0 (0.00)
Severe	2 (18.18)	0 (0.00)
Extreme	0 (0.00)	0 (0.00)
Total Disability (n and %)	11 (25.48)**	1 (3.33)
Areas of Impaired Function		
D1: Understanding and communicating	$2.5 \pm 0.9^{*}$	0.7 ± 0.3
D2: Getting around	$2.9 \pm 1.1^{*}$	1.1 ± 0.5
D3: Self care	1.0 ± 0.8	0.5 ± 0.3
D4: Getting along with people	$2.9 \pm 1.1^{*}$	1.2 ± 0.9
D5: Life activities	$3.1 \pm 1.3^{*}$	1.1 ± 0.8
D6: Participation in society	$2.9 \pm 1.2^{*}$	0.9 ± 0.7
Total Score of The WHO/DAS II	$2.6 \pm 1.1^{*}$	0.9 ± 0.6

* Means p value < 0.05 and ** means p value < 0.01.

Social Phobia patients had impaired function in all areas of functions except self care. Correlation between WHO/DAS II score; SF-36 score and illness severity scores among SP patients was shown in (Table 7). We found that high scores in SPIN and BDI-II were correlated with high score of WHO/DAS II and low score of SF-36 with higher correlation with

BDI-II score than SPIN score.

Table 7: Correlation Between WHO/DAS II Score; SF-36 Score and Illness Severity Scores

Among SP Patients.	WHO/DAS II		SF-36	
	Correlation Coefficient	Significance (2-tailed)	Correlation Coefficient	Significance (2-tailed)
Social Phobia Inventory (SPIN)	0.309*	0.05	0.333*	0.039
Beck Depression Inventory II (BDI-II)	0.627**	0.001	0.605**	0.002

* Correlation is significant at the 0.05 level. ** Correlation is significant at the 0.01 level.

DISCUSSION

This study confirms previous reports^{6,13-16,20-24}, of the high prevalence of social phobia and extends them by demonstrating that many persons with this disorder report that it has interfered substantially with meaningful aspects of their lives. We found that social phobia was a common condition, with a one month prevalence rate of (5.63%) that was within the range of rates found in those similar studies (5%-8%)^{7,15,19}. The rate differences among studies were partly attributed to probable genetic or cultural factors²⁵. Furthermore, major methodological differences (type of diagnostic criteria used, assessment tools, age of the sample, studied population and period of prevalence) may affect the estimates²⁶. We can conclude that Social phobia is the one of the most common mental disorder as proved by different studies^{27,28}. We agree with most of the studies^{20,27-29}, that indicate that social phobia is more common in females than males as we found that females outnumbered males (60.47% vs. 39.53%).

A second major goal of our study was to examine the support for existing social phobia subtyping classification. We found that most of our patients were of generalized subtype (95.35%), a result that is in agreement with many previous studies^{6-8,44}, particularly that was done on Saudi patients³⁶. We are in agreement with the information documented by DSM classification that the generalized subtype is common while the specific subtype is rare. The second explanation regarding this point may be due to that specific subtype patients do not seek help from specialized services. We should continue to distinguish between these two forms of the illness and to explore their possible differential response to various pharmacological and psychological therapies⁷. Our data serve as a reminder that additional research will be required to uncover and validate subtyping of social phobia.

We found that avoidant personality disorder was confined to the patients with social phobia. We are in agreement with previous studies^{30,52,65-68}, that explained this observation; rather than reflecting true co-morbidity per se, most likely is due to the substantially overlapping criteria for the two disorders. Assessing the normal personality domains, our finding is consistent with previous studies^{36,69} that social phobia patients were characteristics with higher neuroticism and lower extraversion than the control group.

In recent years we have come to recognize that social phobia is highly comorbid with other conditions such as depression^{1,6,7,31-35,42}. In this prospective study, we found that the presence of social phobia is a strong risk factor for the subsequent occurrence of depressive illness. Moreover, the combination of depression and social phobia markedly augments the risk for subsequent depressive disorder. Thus, in addition to confirming the findings from retrospective reports that preexisting social phobia increases the risk for "early-onset" depression^{1,19,35,37,38,70-72}. Our observations that 17.24% of social phobia patients had depressive disorders (12.07% had dysthymia and 5.17% had major depression), suggest that those persons with social phobia are at the

greatest risk for subsequent depression. It is important to emphasize that causal inferences cannot be drawn from these observational data but it may be due to common genetic risk factors¹. Socially anxious patients are more likely than their less socially anxious persons to develop problems with self-esteem, lack friendships, demoralization and social isolation^{1,73}. It is therefore reasonable to say that a cause and effect relationship between social phobia and depression exists.

It was not until the ECA findings were reported that a different profile emerged, showing social phobia to be a common disorder associated with significant disability and impairment¹⁷. The findings from this study showed that every index of functional disability and quality of life in persons with social phobia was worse than persons without social phobia. Social phobia carried with it a large, independent burden of illness. This finding is consistent with the observation from clinical studies that social phobia is a serious illness^{5,9,16,17,43,45,46,50-54}. The association between social phobia and functional disability and low quality of life is explained in part by comorbidity with depressive disorders. Comorbid depression contributed moderately to the dysfunction in daily activities, interpersonal relationships, performance in school, educational attainment, dissatisfaction with a variety of life domains and poor quality of life associated with social phobia^{47,74,75}. Effective treatment improves the quality of life of patients with social phobia^{6,45,52-54}. On the other hand, there are several barriers may inhibit patients from coming in for treatment. An inability to afford treatment, a fear of what others might think or say and problems with clinical detection of social phobia each appear to play a role. Educational efforts should seek to increase mental health care professionals' knowledge and skill in detecting clinically significant social anxiety⁷⁶. Taken together with findings from prior studies^{5-7,45,47,48,50,77}, this demonstration of pervasive impairment and reduced quality of life in social phobia should encourage public health policy makers to include social phobia among other serious mental disorders and to implement systematic efforts to treat and/or prevent it and its co-morbid disorders.

Study Limitations

This study is a cross sectional study; one month prevalence. So, we have to do 6 months, 12 months and lifetime prevalence. Furthermore, the study was done in specialized service so it must be replicated on the community.

Clinical Implications

1. Social phobia is a common mental health problem in its generalized subtype.
2. Depressive disorders and avoidant personality disorder may complicate the treatment of patients with SP and increase their functional disability and decrease their quality of life.
3. High neuroticism and low extroversion are common in patients with SP.

4. Early detection, prevention of consequences and early intervention may decrease the burden of illness.

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REFERENCES

1. Stein MB, Fuetsch M, Muller N, Hofler M, Lieb R, and Wittchen HU. Social anxiety disorder and the risk of depression: A prospective community study of adolescents and young adults. *Arch.Gen.Psychiatry* 2001 Mar;58(3):251-6.
2. WHO. The ICD-10 classification of mental and behavioural disorders: Diagnostic criteria for research. Geneva: World Health Organization; 1993.
3. American Psychiatric Association. Diagnostic and statistical manual of mental disorders DSM-IV-TR. 4th ed.: American Psychiatric Publishing, Inc.; 2000.
4. Mannuzza S, Schneier FR, Chapman TF, Liebowitz MR, Klein DF, and Fyer AJ. Generalized social phobia. Reliability and validity. *Arch.Gen.Psychiatry* 1995 Mar;52(3):230-7.
5. Kessler RC, Stein MB, and Berglund P. Social phobia subtypes in the National Comorbidity Survey. *Am.J.Psychiatry* 1998 May;155(5):613-9.
6. Hannah Delong BA and Pollack MH. Update on the assessment, diagnosis and treatment of individuals with social anxiety disorder. *Focus* 2008;6(431):437.
7. Stein MB, Torgrud LJ, and Walker JR. Social phobia symptoms, subtypes and severity: Findings from a community survey. *Arch.Gen.Psychiatry* 2000 Nov;57(11):1046-52.
8. Hook JN and Valentiner DP. Are specific and generalized social phobias qualitatively distinct? *Clin.Psychol.Sci.Prac.* 2002;9(4):379-95.
9. Den Boer JA. Social phobia: Epidemiology, recognition and treatment. *BMJ* 1997 Sep 27;315(7111):796-800.
10. Ballenger JC, Davidson JR, Lecrubier Y, Nutt DJ, Bobes J, Beidel DC, et al. Consensus statement on social anxiety disorder from the International Consensus Group on Depression and Anxiety. *J.Clin.Psychiatry* 1998;59 Suppl 17:54-60.
11. Beidel DC. Social anxiety disorder: Etiology and early clinical presentation. *J.Clin.Psychiatry* 1998;59 Suppl 17:27-32.
12. Van Ameringen M, Allgulander C, Bandelow B, Greist JH, Hollander E, Montgomery SA, et al. WCA recommendations for the long-term treatment of social phobia. *CNS Spectr.* 2003 Aug;8(8 Suppl 1):40-52.
13. Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, et al. Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States. Results from the National Comorbidity Survey. *Arch.Gen. Psychiatry* 1994 Jan;51(1):8-19.
14. Stein MB, Walker JR, and Forde DR. Setting diagnostic thresholds for social phobia: Considerations from a community survey of social anxiety. *Am.J.Psychiatry* 1994 Mar;151(3):408-12.
15. Magee WJ, Eaton WW, Wittchen HU, McGonagle KA, and Kessler RC. Agoraphobia, simple phobia and social phobia in the National Comorbidity Survey. *Arch.Gen.Psychiatry* 1996 Feb;53(2):159-68.
16. Kroenke K, Spitzer RL, Williams JBW, Monahan PO, and Löwe B. Anxiety disorders in primary care: Prevalence, impairment, comorbidity and detection. *Ann.Intern.Med.* 2007;146(5):317-25.
17. Schneier FR, Johnson J, Hornig CD, Liebowitz MR, and Weissman MM. Social phobia. Comorbidity and morbidity in an epidemiologic sample. *Arch. Gen.Psychiatry* 1992 Apr;49(4):282-8.
18. Davidson JR, Hughes DL, George LK, and Blazer DG. The epidemiology of social phobia: Findings from the Duke Epidemiological Catchment Area Study. *Psychol.Med.* 1993 Aug;23(3):709-18.
19. Wittchen HU, Stein MB, and Kessler RC. Social fears and social phobia in a community sample of adolescents and young adults: Prevalence, risk factors and co-morbidity. *Psychol.Med.* 1999 Mar;29(2):309-23.
20. Furmark T. Social phobia: Overview of community surveys. *Acta Psychiatr. Scand.* 2002 Feb;105(2):84-93.
21. Okasha A. Focus on psychiatry in Egypt. *Br.J.Psychiatry* 2004;185:266-72.
22. Mohammadi MR, Ghanizadeh A, Mohammadi M, and Mesgarpour B. Prevalence of social phobia and its comorbidity with psychiatric disorders in Iran. *Depress.Anxiety* 2006;23(7):405-11.
23. Mahfouz AA, Abdelmoneim I, Al-Gelban KS, Daffalla AA, Al Amri H, Shaban H, et al. Adolescents' mental health in Abha City, Southwestern Saudi Arabia. *Int.J.Psychiatr.Med.* 2009;39(2):169-77.
24. Al Gelban KS. Prevalence of psychological symptoms in Saudi Secondary School girls in Abha, Saudi Arabia. *Ann.Saudi Med.* 2009;29(4):275-9.
25. Wittchen HU and Fehm L. Epidemiology and natural course of social fears and social phobia. *Acta Psychiatr.Scand.Suppl.* 2003;108(417):4-18.
26. Wittchen HU. Social phobia: New perspectives on a neglected mental disorder. *Psychiatric Networks* 2000;3(1):5-8.
27. Veale D. Treatment of social phobia. *Adv.Psychiatric.Treat.* 2003;9(4):258-64.
28. Grant BF, Hasin DS, Blanco C, Stinson FS, Chou SP, Goldstein RB, et al. The epidemiology of social anxiety disorder in the United States: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *J.Clin. Psychiatry* 2005;66(11):1351-61.
29. Kadri N, Agoub M, El Gnaoui S, Berrada S, and Moussaoui D. Prevalence of anxiety disorders: A population-based epidemiological study in metropolitan area of Casablanca, Morocco. *Ann.Gen. Psychiatry* 2007;6:6.
30. Okasha A, Omar AM, Lotaief F, Ghanem M, Seif el Dawla A, and Okasha T. Comorbidity of axis I and axis II diagnoses in a sample of Egyptian patients with neurotic disorders. *Compr.Psychiatry* 1996 Mar-Apr;37(2):95-101.
31. Lecrubier Y, Wittchen HU, Faravelli C, Bobes J, Patel A, and Knapp M. A European perspective on social anxiety disorder. *Eur.Psychiatry* 2000 Feb;15(1):5-16.
32. Chartier MJ, Walker JR, and Stein MB. Considering comorbidity in social phobia. *Soc.Psychiatry Psychiatr.Epidemiol.* 2003 Dec;38(12):728-34.
33. Cairney J, Coma LM, Veldhuizen S, Hermann N, and Streiner DL. Comorbid depression and anxiety in later life: Patterns of association, subjective well-being and impairment. *Am.J.Geriatr.Psychiatry* 2008;16(3):201-8.
34. Chaleby KS and Raslan A. Delineation of social phobia in Saudia Arabians. *Soc.Psychiatry Psychiatr.Epidemiol.* 1990 Nov;25(6):324-7.
35. Merikangas KR and Angst J. Comorbidity and social phobia: Evidence from clinical, epidemiologic and genetic studies. *Eur.Arch.Psychiatry Clin. Neurosci.* 1995;244(6):297-303.
36. Clinical profile of social phobia in Saudi patients. *Egy.J.Psychiatr.* 1992;15(2):215-24.
37. Stein MB and Chavira DA. Subtypes of social phobia and comorbidity with depression and other anxiety disorders. *J.Affect.Disord.* 1998 Sep;50 Suppl 1:S11-6.
38. Kessler RC, Stang P, Wittchen HU, Stein M, and Walters EE. Lifetime comorbidities between social phobia and mood disorders in the US National Comorbidity Survey. *Psychol.Med.* 1999 May;29(3):555-67.
39. Parker G, Wilhelm K, Mitchell P, Austin MP, Roussos J, and Gladstone G. The influence of anxiety as a risk to early onset major depression. *J.Affect. Disord.* 1999 Jan-Mar;52(1-3):11-7.
40. Rende R, Warner V, Wickramarante P, and Weissman MM. Sibling aggregation for psychiatric disorders in offspring at high and low risk for depression: 10-year follow-up. *Psychol.Med.* 1999 Nov;29(6):1291-8.

41. Warner V, Weissman MM, Mufson L, and Wickramaratne PJ. Grandparents, parents and grandchildren at high risk for depression: A three-generation study. *J.Am.Acad.Child Adolesc.Psychiatry* 1999 Mar;38(3):289-96.
42. Bassiony MM. Social anxiety disorder and depression in Saudi Arabia. *Depress.Anxiety* 2005;21(2):90-4.
43. Stein MB, Walker JR, and Forde DR. Public-speaking fears in a community sample. Prevalence, impact on functioning and diagnostic classification. *Arch.Gen.Psychiatry* 1996 Feb;53(2):169-74.
44. Weiller E, Bissierbe JC, Boyer P, Lepine JP, and Lecrubier Y. Social phobia in general health care: An unrecognised undertreated disabling disorder. *Br.J.Psychiatry* 1996 Feb;168(2):169-74.
45. Safren SA, Heimberg RG, Brown EJ, and Holle C. Quality of life in social phobia. *Depress.Anxiety* 1996;4(3):126-33.
46. Pelissolo A, Huron C, Fanget F, Servant D, Stiti S, Richard Berthe C, et al. Les phobies sociales en psychiatrie: caracteristiques cliniques et modalites de prise en charge (etude Phoenix). [Clinical and therapeutic characteristics of social phobia in French psychiatry (Phoenix study)]. *Encephale* 2006 Jan-Feb;32(1 Pt 1):106-12.
47. Schneier FR, Heckelman LR, Garfinkel R, Campeas R, Fallon BA, Gitow A, et al. Functional impairment in social phobia. *J.Clin.Psychiatry* 1994 Aug;55(8):322-31.
48. Wittchen HU and Beloch E. The impact of social phobia on quality of life. *Int. Clin.Psychopharmacol.* 1996 Jun;11 Suppl 3:15-23.
49. Stein MB. How shy is too shy? *Lancet* 1996 Apr 27;347(9009):1131-2.
50. Antony MM, Roth D, Swinson RP, Huta V, and Devins GM. Illness intrusiveness in individuals with panic disorder, obsessive-compulsive disorder, or social phobia. *J.Nerv.Ment.Dis.* 1998 May;186(5):311-5.
51. Wittchen HU, Fuetsch M, Sonntag H, Muller N, and Liebowitz M. Disability and quality of life in pure and comorbid social phobia. Findings from a controlled study. *Eur.Psychiatry* 2000 Feb;15(1):46-58.
52. Stein MB, Fyer AJ, Davidson JR, Pollack MH, and Wiita B. Fluvoxamine treatment of social phobia (social anxiety disorder): A double-blind, placebo-controlled study. *Am.J.Psychiatry* 1999 May;156(5):756-60.
53. McCollum S, Kavoussi R and Pande A. Gabapentin treatment of social phobia: Improvement in quality of life. Presented at the Annual Meeting of the New Clinical Drug Evaluation Unit; May 30-Jun 2: Boca Raton, Fla; 2000.
54. Stein MB and Kean YM. Disability and quality of life in social phobia: Epidemiologic findings. *Am.J.Psychiatry* 2000 Oct;157(10):1606-13.
55. Connor KM, Davidson JR, Churchill LE, Sherwood A, Foa E, and Weisler RH. Psychometric properties of the Social Phobia Inventory (SPIN). New self-rating scale. *Br.J.Psychiatry* 2000 Apr;176:379-86.
56. Ragheb M, Ramy H, Hussein H, Zaki N, Shaker N, and El-Shafei A. Psychometric properties of the Arabic version of social phobia inventory (SPIN). *Ain Shams Curr.Psychiatr.*;14(1):36-44.
57. Belloc NB, Breslow L, and Hochstim JR. Measurement of physical health in a general population survey. *Am.J.Epidemiol.* 1971 May;93(5):328-36.
58. Eysenck HJ, Eysenck SBG. Manual of Eysenck personality questionnaire. San Diego: Educational and Industrial Testing Service; 1975.
59. Al-Roetia AS, Al Sharefi HH. Eysenck personality questionnaire-revised (Saudi Form). Al-Riyadh: Research Introduced to King Saud University, KSA; 2003.
60. Beck AT, Steer RA, and Garbin MG. Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clin.Psychol.Rev.* 1988;8(1):77-100.
61. Ware JE, Jr and Sherbourne CD. The MOS 36-item short-form health survey (SF-36). I. Conceptual framework and item selection. *Med.Care* 1992 Jun;30(6):473-83.
62. Ware JE, Snow KK, Kosinski M, Gandek B. Reliability, precision and data quality, in SF-36 health survey: Manual and interpretation guide. Boston: The Health Institute; 1998.
63. Annicchiarico R. New methodology for disability assessment: Analysis of WHO-Disability Assessment Schedule II with clustering based on rules. *AI Commun.* 2003;16(3):213-5.
64. SPSS. Statistical package for social studies. In: Cary NC, editor. USA: SAS Institute; 2002.
65. Schneier FR, Spitzer RL, Gibbon M, Fyer AJ, and Liebowitz MR. The relationship of social phobia subtypes and avoidant personality disorder. *Compr.Psychiatry* 1991 Nov-Dec;32(6):496-502.
66. Holt CS, Heimberg RG, and Hope DA. Avoidant personality disorder and the generalized subtype of social phobia. *J.Abnorm.Psychol.* 1992 May;101(2):318-25.
67. Herbert JD, Hope DA, and Bellack AS. Validity of the distinction between generalized social phobia and avoidant personality disorder. *J.Abnorm. Psychol.* 1992 May;101(2):332-9.
68. Jansen MA, Amtz A, Merckelbach H, and Mersch PP. Personality disorders and features in social phobia and panic disorder. *J.Abnorm.Psychol.* 1994 May;103(2):391-5.
69. Bienvenu OJ, Hettema JM, Neale MC, Prescott CA, and Kendler KS. Low extraversion and high neuroticism as indices of genetic and environmental risk for social phobia, agoraphobia and animal phobia. *Am.J.Psychiatry* 2007;164(11):1714-21.
70. Pine DS, Cohen P, Gurley D, Brook J, and Ma Y. The risk for early-adulthood anxiety and depressive disorders in adolescents with anxiety and depressive disorders. *Arch.Gen.Psychiatry* 1998 Jan;55(1):56-64.
71. Schatzberg AF, Samson JA, Rothschild AJ, Bond TC, and Regier DA. McLean hospital depression research facility: Early-onset phobic disorders and adult-onset major depression. *Br.J.Psychiatry Suppl.* 1998(34):29-34.
72. Essau CA, Conradt J, and Petermann F. Frequency and comorbidity of social phobia and social fears in adolescents. *Behav.Res.Ther.* 1999 Sep;37(9):831-43.
73. Stein MB, Tancer ME, Gelernter CS, Vittone BJ, and Uhde TW. Major depression in patients with social phobia. *Am.J.Psychiatry* 1990 May;147(5):637-9.
74. Mendlowicz MV and Stein MB. Quality of life in individuals with anxiety disorders. *Am.J.Psychiatry* 2000 May;157(5):669-82.
75. Rapaport MH, Clary C, Fayyad R, and Endicott J. Quality-of-life impairment in depressive and anxiety disorders. *Am.J.Psychiatry* 2005 Jun;162(6):1171-8.
76. Olsson M, Guardino M, Struening E, Schneier FR, Hellman F, and Klein DF. Barriers to the treatment of social anxiety. *Am.J.Psychiatry* 2000 Apr;157(4):521-7.
77. Simon NM, Otto MW, Korbly NB, Peters PM, Nicolaou DC, and Pollack MH. Quality of life in social anxiety disorder compared with panic disorder and the general population. *Psychiatr.Serv.* 2002 Jun;53(6):714-8.

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