

ORIGINAL ARTICLE

**PREVALENCE AND FACTORS ASSOCIATED  
WITH PHOBIAS AMONG WOMEN**

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**Abstract**

**Objective:** The present study is carried out to explore the factors associated with phobia, to compare the severity of phobias between cases (mentally ill women) and controls (never mentally ill) and to identify the factors predicting different types of phobias. **Methods:** A cross sectional study among female cases and controls is conducted. A sample of 150 female respondents including 30 cases and 120 controls is taken to assess the point prevalence of different types of phobias. The Social Phobia Inventory (SPIN) questionnaire was used to identify social phobia on a very severe, severe, moderate, mild and no phobia scale. Pearson chi square and spearman's rank correlation was applied to assess the associations among different factors and various types of phobias. **Results:** The most common phobia among the population was Agrizoophobia (93%) followed by Agoraphobia (81%) and Taphophobia (74%). Among cases, age is was associated with Agoraphobia and Acrophobia, marital status of the respondent was associated with Agoraphobia and Acrophobia, marital status of father is associated with social phobia and Aichmophobia, traumatic event was associated with Mysophobia while family income was associated with Acrophobia and Aichmophobia. Age and Agoraphobia, and marital status and Acrophobia show significant results among controls. Multiple discriminant Analysis demonstrated that among cases, age was the best predictor in predicting Agoraphobia and Acrophobia , marital status of father was the best predictor in predicting Nosocomeophobia and traumatic event was the best predictor in predicting Mysophobia. **Conclusion:** Severe specific phobias are more prevalent among cases while controls suffer from mild specific phobias. Age, marital status of father and traumatic event in life are significant predictors for phobias. *ASEAN Journal of Psychiatry, Vol. 15 (2): July – December 2014: 140-145.*

**Keywords:** Phobia, Pearson Chi Square, Spearman's Rank Correlation, Discriminant Analysis, Traumatic Event

**Introduction**

A phobia is an intense but unrealistic fear that can interfere with the ability to socialize, work, or go about everyday life, brought on by an object, event or situation. A phobia is an irrational and excessive fear of an object or situation [1]. In most cases, the phobia involves a sense of fear of harm. Phobias are found to be the most common psychiatric disorder in the community, more common than

major depression or alcohol abuse. The one month prevalence is between 4.0 and 11.1%, with the estimated prevalence in the United States being 6.2% [2]. Specific phobia is the fear of a particular situation or object, including anything from airplane travel to dentists, the specific phobias may also include concerns with losing control, panicking, and fainting which are the direct result of an encounter with the phobia [3]. Women are twice as likely to suffer from specific phobias

as men [4]. Thus, specific fears and phobias are heterogeneous with respect to sex and age distribution [5]. A study conducted on the university students reported that majority of the students (53.85%) have some kind of phobia. The highest type of phobia reported was phobia from snake (11.5%), followed by speaking in front of a crowd (9.2%) and the lowest were phobia of speed, dolls phobia, and ropes phobia [6]. Social phobia is a persistent and irrational fear of situations that may involve scrutiny or judgment by others, such as parties and other social events. Social phobia is one of the most common anxiety disorders [7] and is among the most common psychiatric illnesses [8]. The lifetime prevalence rate of social phobia ranges from 3-13% [9, 10, 11, 12], onset is typically in childhood or early adolescence [10, 13], a critical time period for developing social skills; rarely does social phobia develop in later adulthood<sup>[13]</sup>. According to a study, social phobia was higher in younger age groups and widows/widowers [14]. A previous negative social experience can also be a trigger to social phobia, [15, 16] perhaps particularly for individuals high in 'interpersonal sensitivity'. For around half of those diagnosed with social anxiety disorder, a specific traumatic or humiliating social event appears to be associated with the onset or worsening of the disorder [17], this kind of event appears to be particularly related to specific (performance) social phobia. Agoraphobia is the intense fear of feeling trapped and having a panic attack in a public place. Causes of agoraphobia are unknown but several risk factors have been identified, including having panic disorder or an alcohol or substance use disorder, experiencing a stressful life event, being female, or having a tendency to be nervous or anxious [18]. A study of the incidence of agoraphobia identified previous panic disorder as the strongest predictor; having other additional phobias was also a predictor [19]. Another study found individuals with subsequent chronic health conditions and individuals who were widowed or divorced/separated (as opposed to those who were married) at increased risk for agoraphobia [20]. People with social phobia had lower employment rates and household income compared to those

with no psychiatric morbidity [21]. Social phobia (12.7%) was the commonest phobia found followed by agoraphobia (8.6%), most common phobias observed being social phobia, agoraphobia and specific phobia [22]. According to a study, the lifetime prevalence of any specific phobia was 12.8%, with subtypes ranging in prevalence between 0.2% (vomiting, infections) and 5.0% (animals) [23]. Specific phobias that continue into adulthood generally become chronic if untreated. Persons with several phobias could not overcome phobia on their own, they may require some type of treatment. Current studies on the prevalence and factors associated with phobias among women, mentally ill and never mentally ill are lacking for Pakistan. Therefore, this study is carried out to find the prevalence and factors associated with phobias among mentally ill and never mentally ill women.

## **Methods**

A cross sectional study is conducted among the female cases and controls. A sample of 150 women aged twenty years were taken. Data is collected using, simple random sampling design for cases while stratified, cluster and systematic random sampling designs respectively for controls. A well structured questionnaire, Social Phobia Inventory (SPIN) is used to gather the data. SPIN gives scores of 0 to 68. Each item is answered on a five-point scale. Items are scored as 0 (Not at all), 1 (A little bit), 2 (Somewhat), 3 (Very much), and 4 (Extremely), and summed to produce a final score. SPIN scores of 19 and over are considered to indicate clinical levels of social phobia [23].

The data was collected from cases and controls restricting their age group and social status according to the cases. Chi-square test of association, Spearman's rank correlation and Multiple Discriminant Analysis were used to analyze the data.

## **Results**

The results of the study indicated that majority of the respondents were married, from low income group. Majority of the respondents were educated and were from the urban area.

**Table 1. Percentage distribution of various Phobias among Cases and Controls**

<b>Variables</b>	<b>Cases (%, Severity of phobia)</b>	<b>Controls (%, Severity of phobia)</b>
Traumatic Events	76.7	37.5
Prevalence of phobias in adulthood	46.67	26.67
Agoraphobia	36.67 (moderate)	27.5 (mild)
Social phobia	30 (moderate)	28.33 (moderate)
Agrizzophobia	83.33 (severe)	70 (severe)
Nosocomeophobia	33.33 (severe)	29.17 (severe)
Mysophobia	26.67 (severe)	-
Acrophobia	60 (severe)	34.17 (mild)
Aichmophobia	53.33 (severe)	
Taphophobia	33.33 (severe)	45.83 (mild)
Thalassophobia	70 (severe)	-

The cases have experienced more traumatic events (76.7%) in their lives as compared to controls (37.5%), the phobias were more prevalent in adulthood for cases (46.67%) as well as for controls (26.67%). Agoraphobia was moderate among cases (36.67%) as compared to mild in controls (27.5%), whereas social phobia was moderate in cases (30%) and controls (28.33%). Agrizzophobia was severe in both cases (83.33%) and controls (70%) while Nosocomeophobia was severe

among cases (33.33%) as compared to controls (29.17%). Mysophobia was severe among cases (26.67%) whereas Acrophobia was severe among cases (60%) whereas mild in controls (34.17%). Aichmophobia was severe among cases (53.33%) while Taphophobia was severe (33.33%) among cases whereas mild in controls (45.83%). Thalassophobia was severe among cases (70%) while majority of the controls (45%) do not suffer from this phobia (Table 1).

**Table 2. Chi Square Associations/Spearman's Rank Correlations of Cases**

<b>Dependent Variables</b>	<b>Independent Variables</b>					
	<b>Age</b>	<b>Marital Status</b>	<b>Family Income</b>	<b>Marital Status of Father</b>	<b>Marital Status of Mother</b>	<b>Traumatic Event</b>
Agoraphobia	0.411*	0.633*				
Social phobia				0.593*	0.584*	
Mysophobia						0.614**
Acrophobia	-0.584*	0.613*	-0.460*			
Aichmophobia			-0.651**		0.556*	

\*Correlation is significant at 0.05 level (two-tailed test)

\*\*Correlation significant at 0.01 level (two-tailed test).

Among cases, age and marital status of respondents were significantly associated with Agoraphobia and Acrophobia, family income was significantly associated with Acrophobia and Aichmophobia, marital status of father and marital status of mother was significantly

associated with Social phobia, marital status of mother was significantly associated with Aichmophobia and traumatic event was significantly associated with Mysophobia (Table 2).

**Table 3. Chi Square Associations/Spearman's Rank Correlations of Controls**

Dependent variables	Independent variables	
	Age	Marital status
Agoraphobia	0.380**	
Acrophobia		0.444*

\*. Correlation is significant at 0.05 level (two-tailed test)

\*\*. Correlation is significant at 0.01 level (two-tailed test).

Among controls, age was significantly associated with Agoraphobia and marital status was significantly associated with Acrophobia.

To analyze variables predicting different types of phobias among cases, discriminant analysis was applied (Table 3). To predict Agoraphobia, predictor variables taken were age, marital status, family income, qualification, family system, family background, marital status of father, marital status of mother, traumatic event and age period in which a respondent experienced any traumatic event. Stepwise Discriminant analysis demonstrated that Age was the best predictor for Agoraphobia and Acrophobia, marital status of father was the best predictor for Nosocomeophobia and Traumatic event was the best predictor for Mysophobia. The predicting discrimination models for Agoraphobia, Acrophobia, Nosocomeophobia and Mysophobia were as follows: -

$$D(\text{Agoraphobia}) = 1.396 \text{ Age} - 2.931$$

$$D(\text{Nosocomeophobia}) = 1.564 \text{ Marital status of father} - 2.293$$

$$D(\text{Mysophobia}) = 1.862 \text{ Traumatic event} - 2.483$$

$$D(\text{Acrophobia}) = 1.404 \text{ Age} - 2.948.$$

## Discussion

In this study, the point prevalence rates of different phobias were assessed, the prevalence of Agoraphobia was 83% among cases and 80% among controls, and the prevalence of social phobia was 77% among cases and 61% among controls. The prevalence of Agrizoophobia was 97% among cases and 92% among controls and the prevalence of Nosocomeophobia was 50% among cases and 38% among controls. The prevalence of Mysophobia was 73% among cases and 53% among controls and the

prevalence of Ablutophobia was 43% among cases and 16% among controls. The prevalence of Nosocomeophobia was 80% among cases and 66% among controls and the prevalence of Aichmophobia was 87% among cases and 44% among controls. The prevalence of Taphophobia was 73% among cases and 74% among controls and the prevalence of Thalassophobia was 80% among cases and 55% among controls. The highest type of phobia reported in the current study was Agrizoophobia followed by Agoraphobia, which is in line with the studies conducted by Al-Naggar (2012) and Bener (2011). According to this current study, a previous negative social experience can trigger the Mysophobia while some studies [15, 16] demonstrated that previous negative social experience can be a trigger to social phobia, perhaps particularly for individuals high in 'interpersonal sensitivity'. This current study suggests that age is the best predictor of Agoraphobia and Acrophobia, marital status of father is the best predictor of Nosocomeophobia and traumatic event in life is the best predictor of Mysophobia. A study by Bienvenu (2006) that explored the incidence of agoraphobia identified previous panic disorder as the strongest predictor for agoraphobia and having additional phobias also predicted agoraphobia.

## Conclusion

Severe specific phobias were more prevalent among cases while controls suffered from mild specific phobias. The associations between age and Agoraphobia, and marital status and Acrophobia were observed respectively. Age was a significant predictor in predicting Agoraphobia and Acrophobia, marital status of father was a significant predictor in predicting

Nosocomephobia and traumatic event was a significant predictor for Mysophobia.

## References

1. American Psychiatric Association. Diagnostic and statistical manual of mental disorders (4th ed.) (DSM-IV). Washington D.C.1994.
2. Boyd JH, Rae DS, Thompson JW, Burns BJ, Bourdon K, Locke BZ, Regier DA. Social Psychiatry and Psychiatric Epidemiology. November 1990;25(6):314 – 323.
3. Diagnostic and Statistical Manual of Mental Disorders, 4th ed. Washington D.C.: American Psychiatric Association. 1994.
4. Cameron A. Crash Course Psychiatry. Elsevier Ltd. 2004.
5. Fredrikson M, Annas P, Fischer H, Wik G. Gender and age differences in the prevalence of specific feras and phobias. Behav Res Ther. 1996;34:33-9.
6. Al-Naggar RA. Prevalence and Associated Factors of Phobia and Social Anxiety among University Students, ASEAN Journal of Psychiatry. July-December 2012;13(2): 112-121.
7. Wittchen H-U, Fehm L. Epidemiology, patterns of comorbidity, and associated disabilities of social phobia. Psychiatric Clinics of North America.2001; 24(4):617-641.
8. Miller MC., ed. Social phobia – Part 1. Harvard Mental Health Letter 1994; 11(4): 1-3.
9. Government of Canada. The Human Face of Mental Health and Mental Illness in Canada, Minister of Public Works and Government Services Canada. Catalogue no. 2006.: HP5-19/2006E.
10. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. Washington, DC: American Psychiatric Association; 1995.
11. Kessler RC, Berglund P, Demler O, Jin R, Walters EE. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Archives of General Psychiatry. 2005; 62(6):593-602.
12. Kessler RC. The impairments caused by social phobia in the general population: Implications for intervention. Acta Psychiatr Scand. 2003; 108(Suppl 417):19-27.
13. Wittchen H-U, Fehm L. Epidemiology and natural course of social fears and social phobia. Acta Psychiatr Scand. 2003; 108(Suppl 417):4-18.
14. Mohammadi MR, Ghanizadeh A, Mohammadi M, Mesgarpour B. (2006). Prevalence of social phobia and its comorbidity with psychiatric disorders in Iran. Depression and Anxiety 23(7):405-151.
15. National Center for Health and Wellness. Causes of Social Anxiety Disorder. Retrieved February 24, 2006.
16. Athealth.com. Social phobia. 1999. Retrieved February 24, 2006.
17. Mineka S, Zinbarg R (1995) Conditioning and ethological models of social phobia. In: Heimberg R, Liebowitz M, Hope D, Schneier F, editors. Social Phobia: Diagnosis, Assessment, and Treatment. New York: The Guilford Press, 134–162.
18. Mayo Clinic. Agoraphobia. Available at: <http://www.mayoclinic.com/print/agoraphobia/DS00894/DSection=all&method=print>. Accessed November 2010.

19. Bienvenu OJ, Onyike CU, Stein MB, Chen, L-S, Samuels J, Nestadt G, Eaton WW. Agoraphobia in adults: incidence and longitudinal relationship with panic. *B J Psychiatry*. 2006;188:432-438.
20. McCabe L, Cairney J, Veldhuizen S, Herrmann N, Streiner DL. Prevalence and correlates of agoraphobia in older adults. *American Journal of Geriatric Psychiatry*.2006; 14(6):515-522.
21. Patel A, Knapp M, Henderson J, Baldwin D. The economic consequences of social phobia. *J Affect Disord*. 2002; 68:221–33.
22. Bener A, Ghuloum S, Dafeeah EE. Prevalence of common phobias and their socio-demographic correlates in children and adolescents in a traditional developing society. *AfrJPsychiatry*.2011;14:140145.
23. Connor KM, Davidson JR, Churchill LE, Sherwood A, Foa E, Weisler RH. Psychometric properties of the Social Phobia Inventory (SPIN). New self-rating scale. *Br J Psychiatry*. 2000 Apr;176:379–386.

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