

Prevalence of Panic Disorder in a Sample of Egyptian Medical Outpatient Attendees

Mohmaed^{1,3}, K. Ragheb², H. Attia², R. Ismail², A. El-Missiry¹, O. Al-Azazzi²

¹Institute of Psychiatry, Faculty of Medicine, Ain Shams University, Abbassia, Cairo, Egypt. ²Faculty of Medicine for Girls, Al-Azhar University, Cairo, Egypt. ³Past President, World Psychiatric Association, Geneva, Switzerland.

Date received: 15/07/2008

Date accepted: 5/12/2007

Background: Panic Disorder is a serious and common psychiatric disorder that often present with physical complaints and is commonly misdiagnosed as a medical illness usually of cardiac and pulmonary nature. Panic Disorder can be a disabling and chronic condition that incurs huge economic costs, either direct cost due to health services utilization, investigations, and treatment; or indirect cost due to disability, work days lost, high risk of substance abuse, and suicidal risk. Misdiagnosis can add not only to the morbidity and mortality; but also to the costs of this disorder.

Objectives: The aim of this work was to determine the prevalence of Panic Disorder among a sample of patients attending Al-Zahraa University Hospital Clinics.

Subjects and Methods: Cases were recruited from the attendees (n=13343) of the internal medicine, chest, and cardiac clinics at Al-Zahraa University Hospital. All consenting subjects aging between 15-60 years with no underlying medical illness detected were selected from the total out-patient clinic attendees (group-I, n=500). 500 apparently healthy matched controls were recruited from hospital staff (group-II). Both groups were screened for Panic Disorder by a clinical psychiatric interview along with a semi-structured

psychiatric interview based on DSM-IV criteria for diagnosis of Panic Disorder. Those with Panic Disorder in group-I were further subjected to symptoms rating using Hamilton Rating Scale for Anxiety (HAM-A) and Sheehan Patient-Rated Anxiety Scale (SPRAS).

Results: The prevalence of Panic Disorder among group I was 45.4% (n=227) compared to only 1.2% (n=6) in the control group II. In group I the prevalence of PD among females was more than males (61.7% vs. 38.3%), it was highest in attendees of the chest clinic (59.69%, n=75), followed by cardiac clinic (52.5%, n=75), and internal medicine clinic (33.9%, n=77). The most commonly symptoms were dyspnea (71.8%), palpitation (64.8%), fear of dying (63.4%), chest pain (55.9%) and fear of losing control (20.7%). There was high significant positive correlation between the frequency of panic attacks and the severity of symptoms. Also there was high significant correlation between the severity of anxiety symptoms according to HAM-A and severity of panic related symptoms according to SPRAS.

Conclusion: Panic Disorder is prevalent in general medical settings, and despite the severity of symptoms it is often unrecognized.

Keywords: Panic Disorder, Prevalence, Medical Setting, Outpatient Attendees

Abbreviations:

HAM-A: Hamilton Rating Scale for Anxiety
DSM-IV: Diagnostic and Statistical Manual of Mental Disorders- Fourth Edition

PD: Panic Disorder
SPRAS: Sheehan Patient-Rated Anxiety Scale

Egypt. J. Psychiatry, Jan 2009; 29(1): ...-...

INTRODUCTION

Panic Disorder (PD) is a prevalent, impairing, under-recognized, and often mistreated condition (Lee, et al. 2005). International epidemiologic data reported PD lifetime prevalence between 1.6% and 2.2% in general population (Weissman, et al. 1997). The prevalence rates as of panic disorder in primary care setting reported in the literature vary widely. Roy Byrne, et al. (2005) noted a median prevalence around 4%; while Birchall, et al. (2000) found a lifetime prevalence of 8.6%. Prevalence rates grow higher among certain patient populations, such as those with cardiac (20-50%) or, gastrointestinal (28-40%) presentations (Roy Byrne, et al. 2005).

Moreover, there is an association between panic disorder and high rates of utilization of medical services and increased medical costs. Carr, (1999) stated that

individuals with panic disorder report seven times more physician visits than those in the general population. Patients frequently undergo extensive and costly diagnostic procedures to rule out physical illness, this incurs unnecessary medical costs (Zaubler and Katon, 1998).

The inadequate recognition of panic disorder (Roy Byrne, et al. 1999; 2002), along with the persistence of medically unexplained symptoms not only add to this financial burden; but also have a negative impact on social and vocational functions of the individual (Katon, 1996). Epidemiological studies and analyses of data from clinical trials suggest that patients with panic disorder suffer significant work and social dysfunction (Rubin, et al. 2000). Individuals with panic disorder report more than twice as many work days lost than in

general population (Carr, 1999). Eguchi, et al. (2005), found that panic patients reported a less than average quality of life in both physical and mental domains and substantial social dysfunctions, especially in work and social leisure activities.

In addition to the economic cost, panic disorder is usually comorbid with other psychiatric conditions. The presence of comorbidity results in more severe symptoms, increased risk of substance abuse, higher rates of suicide attempts, and poor response and compliance to treatment (King, et al. 1995; Lecrubier, 1998).

Hence the need for early identification and appropriate treatment of patients with panic disorder at primary care settings to improve quality of life and productivity and reduce unnecessary health care costs (Culpepper, 2004).

OBJECTIVES

To estimate the prevalence, severity and symptoms of panic disorder among a sample of patients attending the outpatient medical clinics (Chest, heart, and general medicine).

SUBJECTS AND METHODS

Ethical committee approval was granted from Al-Azhar University. Appropriate details about the nature of the study, method, aim, confidentiality, and participant's rights were explained to every participant. Those willing to participate completed a consent form.

From the attendees (N=13343) of medical outpatient clinics (Chest, heart, and general medicine clinics) at Al-Zahraa hospital, we were able to recruit 500 subjects (Group I). The inclusion criteria were; capacity to produce written consent, age range between 15-60 years, of both sexes, and absence of any medical illness (Figure 1). Apparently healthy control individuals (Group II; n=500) were recruited from individuals working in Al-Zahraa hospital and were matched for age, sex, and educational level.

All subjects were subjected to a clinical interview including medical history, and a semi-structured clinical psychiatric interview based on DSM-IV TR (American Psychiatric Association, 1994) for diagnosis of panic disorders. Those in group-I were further subjected to Hamilton Rating Scale for Anxiety (HAM-A) (Hamilton, 1959) and Sheehan Patient-Rated Anxiety Scale (SPRAS) to evaluate the severity of anxiety related to panic disorder (Sheehan, 1983).

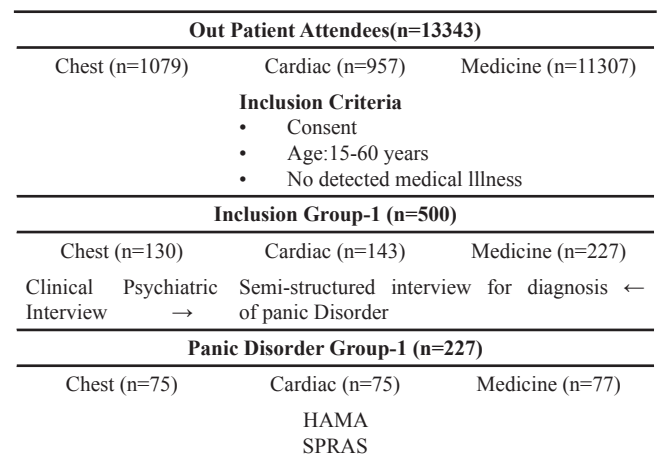


Fig. 1: Selection of cases.

Data analysis was done using Statistical Package for Social Sciences Version-11 (SPSS-11). For parametric data mean, standard deviation, and t-test were used. For non- parametric data Chi-square (x2) and Spearman's rank correlation coefficient were used.

RESULTS

Table (1) shows the demographic of the sample. More than half of participants in both groups were females. The mean age was 30.72±4.3 in group-I and 30.65±5.7 in group-II. The prevalence of panic disorder among group I was 45.4% (N=227) compared to only 1.2% (N=6) in control group II. In group-I the prevalence was highest in attendees of the chest clinic (59.69%, n=75), followed by cardiac clinic (52.5%, n=75), and internal medicine clinic (33.9%, n=77) as seen in (Figure 1). Based on the clinical interview, we also found high degree of psychiatric comorbidity (39.6%, n=90) in group-I. This was attributed mainly to depression (36.9%, n=77).

Table 1: Demographics data:

	Group-I (n=500)		Group-II (n=500)	
	N	%	N	%
Gender				
• Male	232	46.4	235	47
• Female	268	53.6	265	53
Mean Age±SD	30.72 ± 4.3		30.65 ± 5.7	
Age groups	N	%	N	%
• 15-25 years	156	31.2	162	32.4
• 26-35 years	109	21.8	111	22.2
• 36-45 years	135	27.0	118	23.6
• 46-55 years	82	16.4	84	16.8
• 55-60 years	18	3.6	25	5
Educational Level	N	%	N	%
• Illiterate	131	26.2	129	25.8
• Primary	63	12.6	59	11.8
• Secondary	168	33.6	160	32.0
• University	138	27.7	152	30.4
Marital Status	N	%	N	%
• Single	165	33.0	109	21.8
• Married	271	54.2	351	70.2
• Divorced	20	4.0	271	5.4
• Widowed	44	8.8	13	2.6

Further analysis of the demography of those with PD in group-I in this study revealed higher prevalence of Panic Disorder in females (61.7%, n=140), increased preponderance in those in their third and fourth decades, and overrepresentation in those who are married (55.9%, n=127), unemployed (48.9%, n=111), and illiterate (40.1%, n=91) individuals.

Table 2 a,b: Demographic and clinical variables in panic disorder group:

Table 2(A):

A) Demographic Variables	Panic Disorder Group (n=227)	
	N	%
Gender		
• Male	87	38.3
• Female	140	61.7
Age groups	N	%
• 15-25 years	52	22.9
• 26-35 years	35	15.4
• 36-45 years	82	36.1
• 46-55 years	44	19.4
• 55-60 years	14	6.2
Educational Level	N	%
• Illiterate	91	40.1
• Primary	38	16.3
• Secondary	75	33.0
• University	23	10.1
Marital Status	N	%
• Single	30	13.2
• Married	127	55.9
• Divorced	34	15.0
• Widowed	6	2.6
Occupational Status	N	%
• Unemployed	111	48.9
• Manual Worker	70	30.8
• Employee	45	19.8
• Professional	1	0.4

In our study, most of the individuals suffered frequent attacks mostly on weekly (48.9 %, n=111) or daily (31.7%, n=72) basis. This correlated statistical correlation with the severity of panic symptoms scores on SPRAS. The panic attacks appear to cluster at night time, and surprisingly there were no exclusive daytime attacks reported. 44% (N=100) of the individuals reported a chronic course of more than 12 months (Table 2b).

Table 2(B):

B) Clinical Variables	Panic Disorder Group (n=227)	
Mean HAM-A score	25.4 ±4.81`	
HAM-A severity	N	%
• Mild	60	26.4
• Moderate	129	56.8
• Severe	38	16.7
Mean SPRAS score	64.20 ±12.73	
• Moderate (20-80)	184	81.1
• Severe (>80)	43	18.9
Frequency of attacks	N	%
• Daily	72	31.7
• Weekly	111	48.9
• Monthly	44	19.4
Time of attacks	N	%
• Morning	0	0
• Night	112	49.3
• Morning and Night	115	50.7
Duration of illness	N	%
• <6 months	66	• 29.1
• 6-12 months	61	26.9
• >12 months	100	44.0
Psychiatric Comorbidity *	N	%
• Depression	77	• 33.9
• Substance misuse	6	2.6
• Others	7	3.0

* based on clinical interview diagnosis

The most common symptoms were dyspnea (71.8%), palpitation (64.8%), fear of dying (63.4%), chest pain (55.9%) and fear of losing control (20.7%). There was an apparent difference in symptoms between males and females. The latter had statistically significant more chest pains (p=0.008), fear of dying (P=0.009), sense of losing control (P<0.00), choking (P=0.01), parathesia (P=0.02), and trembling (P<0.00).

Moreover, symptoms appear to differ according to the clinic attended by the patient. Attendees to the chest and internal medicine clinics had statistically more dyspnoea (P<0.00) than heart clinic attendees. Chest pain, dizziness, and parathesia were also more pronounced in chest clinic attendees (Table 3).

The majority of the individuals had at least two investigations to exclude physical causes. The most common were cardiopulmonary investigations that ranged from simple ECG (99.6%) to invasive angiography (7%). The number of investigations showed statistical correlation with the severity of panic symptoms scores on SPRAS.

Table 3: Difference in symptomatology in panic disorder group:

	Total	Gender Difference				Clinic Difference				
		M	F	χ ²	P	C	H	I	χ ²	P
Dyspnoea	163	57	106	2.756	0.097	73	20	70	103.8	0.000‡
Palpitation	147	59	88	0.578	0.447	18	65	64	80.76	0.000‡
Chest Pain	127	39	88	7.077	0.008†	54	30	43	14.93	0.001†
GIT symptoms	39	15	24	0.00	0.985	3	2	34	54.45	0.000‡
Fear of dying	144	46	98	6.785	0.009†	46	51	47	2.77	0.25
Depersonalization/De-realisation	32	12	20	0.011	0.917	15	10	7	4.32	0.115
Dizziness	36	12	24	0.451	0.502	27	4	5	35.01	0.000‡
Sweating	13	8	5	3.143	0.076	3	4	6	0.811	0.667
Loosing control	47	5	42	19.22	0.000‡	12	15	20	1.693	0.429
Chocking	4	4	0	6.552	0.01†	0	3	1	3.862	0.145
Parathesia	30	6	24	4.912	0.02*	17	5	8	9.399	0.009†
Chills	20	4	16	3.116	0.078	5	7	8	0.578	0.749
Trembling	14	14	0	24.00	0.000‡	1	9	4	8.167	0.017*

M= Male, F= Female, C= Chest Clinic, H= Heart Clinic, I= Internal Medicine Clinic; *Significant, † Highly Significant, ‡ very highly Significant

Table 4: Number of investigations in panic disorder group:

Panic Disorder Group (n=227)		
Type of Investigation	N	%
• ECG	226	99.6
• ECHO cardiogram	184	81.1
• Chest X-ray	90	39.6
• Respiratory Functions	22	9.7
• Angiography	16	7
• 24hr ECG	11	4.8
• EEG	6	2.6
• Endoscope	6	2.6
• Stress ECG	5	2.2
No of Investigation per patient	N	%
• One Investigation	14	6.2
• Two Investigations	104	45.8
• Three Investigations	89	39.2
• Four Investigations	18	7.9
• Five Investigations	2	0.8

Table 5: Correlation to severity of panic symptoms:

	Mean SPRAS Score	F ratio	P Value
Frequency of attacks			
Daily	51.22±18.90		
Weekly	70.86±28.34	15.02	0.000‡
Monthly	68.61±21.46		
Duration of illness			
<6m	62.56±28.26		
6-12m	64.49±26.16	0.165	0.83
>12m	65.10±24.24		
No of Investigation			
One	85.36±2.37		
Two	64.54±26.77		
Three	63.53±25.67	3.776	0.003†
Four	49.17±21.09		
Five	45.14±20.47		

DISCUSSION

This study was designed to shed light on panic disorder as regards to its prevalence especially among medically free outpatient clinic attendees, profile of symptoms, severity of symptoms and utilization of unnecessary services.

Prevalence of panic disorder:

Panic disorder is a prevalent psychiatric disorder. The 12-month prevalence estimated to be 1.8% (Range: 0.7-2.2), while lifetime prevalence were reported to be 5.1% (Goodwin, et al. 2005; Grant, et al. 2006). In our non-patient group, the prevalence of panic disorder (1.2%). The relatively low prevalence rate in this group can be attributed to the sample selection, and can be seen as an underestimate of an expected higher prevalence in Egyptian general population.

In primary care settings the prevalence of panic disorder varies considerably with some reported rates between 4% -14% (Birchall, et al. 2000; Roy Byrne, et al. 2005; Broers, et al. 2006). Moreover, Olsson, et al. (1996) in an outpatient primary care sample noted that sub-threshold panic symptoms were nearly five times more common than, and as disabling as, threshold Panic Disorder. Hence, primary care physicians should attach adequate attention to the under-diagnosed sub-threshold cases as they are usually associated to show high symptomatic severity, substantial distress, disability and functional impairment, as well as high comorbidity and increased suicide risk (Lecrubier and Ustun, 1998; Goodwin, et al. 2005).

Relatively few studies examined patients with panic disorder in a medical setting. Rates are expected to be higher among certain patient populations, such as those with cardiac, respiratory, or gastrointestinal presentations (Roy Byrne, et al. 2005). In our study the overall prevalence of panic among attendees of medical clinics with medically unexplained symptoms was 45.4%. Prevalence in attendees of the chest clinic was (59.69%), followed by cardiac (52.5%), and internal medicine (33.9%) clinics. Our results are nearly consistent with the report of Roy Byrne, et al. (2005) where prevalence of PD average around 20-50% in cardiac out patients, and 28-40% in general medicine clinics. In an Egyptian sample El-Mahdi, (2008) also found that 53.8% of cardiac outpatient attendees had Panic Disorder. Our finding of high prevalence of Panic Disorder in medically free outpatient clinic attendees and the frequency of investigations performed reflect the possible under-recognition of the disorder as well as the high degree of health utilization by this group. Patients with panic disorder were found to utilize primary services at 3 times the rate of other patients (Roy Byrne, 2002).

Moreover, excessive medical costs are usually incurred from the extensive medical workups (Leon, et al. 1997; Barsky, et al. 1999), which may be partly due to the unrecognising and/or the ineffective management of these patients by primary care physicians (Goodwin, et al. 2005; Rollman, et al. 2005). This unnecessary utilization of resources has an enormous impact on health care budgets. Egypt is a developing country with an already strained health budget that needs to minimize the costs of inappropriate health services utilization by such patients. Therefore, it is prudent for policy makers to consider investment in educational and training courses for medical specialists along with health education campaigns for the general population about panic and other psychiatric disorders.

Clinical correlates of panic disorder:

Panic disorder has a bimodal age of onset, typically developing either between teens and around 30/40

years of age (Sansone, et al. 1998). This was consistent with Galaverni, et al. (2005) indicating that panic disorder was more common in patients aged 15-44 years. **Ramage-Morin, (2004)** stated that the average age of panic disorder is about 25 years. While, Goodwin, et al. (2005) in their study of the epidemiology of panic disorder and agoraphobia in Europe, found that panic disorder is more common in adolescence and early adulthood. In Egyptian studies, Okasha, et al, (1994) found that the mean age of patients with panic disorder was 31.6 years. El-Mahdi, (2008) reported that panic was prevalent in two age groups; below 20 and between 40-49 years.

Several studies indicated that women are disproportionately affected by mental health problems and that their vulnerability is closely associated with marital status, work, and roles in society (Afifi, 2007). With respect to Panic Disorder, epidemiological studies show that women are at least twice as likely as men to develop the disorder during their lifetimes (Joyce, et al. 1989; Goodwin, et al. 2005; Kelly, et al. 2006). In the Arab countries, literature concerning this issue is growing steadily. **Kadri, et al. (2007)** in a Moroccan population-based epidemiological study, reported a higher point prevalence of PD in females compared to males (87.5% vs. 12.5%). We also found high prevalence in females (61.7% vs. 38.3%). Moreover, the results of this study indicate a gender differences in specific symptoms where females had statistically significant more chest pain, fear of dying, sense of losing control, choking, paresthesia, and trembling in comparison to males. Sheikh, et al. (2002) also reported significantly greater proportion of female subjects experienced significant respiration-related symptoms as difficulty breathing, feeling faint, and feeling smothered than males and suggested that females showed greater CO₂ sensitivity.

Another important socio-demographic risk factor is the level of education. Schmidt, (2002) reported that persons with fewer than twelve years of education were 10 times more likely to have panic disorder than a highly graduated group; in the current study the majority of patients with panic disorder (40.1%) were illiterate or completed less than 9 years of primary (16.7%) and secondary (33.0%) education. The increased prevalence of panic disorder in persons with fewer years of education may be explained by the ability of educated persons to cope better with stressors, Christensen, et al. (2006) in their study about the effect of educational attainment on coping with stressors, found significant association between low educational attainment and low use of problem-solving coping strategies, self rated health, and high use of avoidant coping strategies. On the other hand, illiterate persons usually have lower income and high levels of unemployment which can add to their social stressors.

Marital status may be a significant risk factor for panic disorder. In Western countries high lifetime prevalence rates of PD are found in widowed, separated or divorced subjects (Wittchen and Essau, 1993). Contrary to the western notion that marriage or a stable relationship is a protective factor against mental illness (Riecher Rossler, et al. 1992), we found that more than half (55.9%) of our sample were married. This was also reported in a previous Egyptian study by Darwish, (1992) and may highlight that in Egyptian culture marriage at least does not bear this thought of protective effect, if not a risk factor itself. Hence, this finding should be investigated further.

Despite the apparent uniformity in patients' phenomenological description of panic attacks and related symptoms profile we found a considerable variation in respect to type and frequency of reported symptoms in each of the investigated clinics. Attendees to the chest and internal medicine clinics had statistically more dyspnoea ($P < 0.00$) than heart clinic attendees. Chest pain, dizziness, and parathesia were also more pronounced in chest clinic attendees.

Meuret, et al. (2006) described three subtypes of panic symptoms; the cardio-respiratory sub-type which include symptoms of palpitation, shortness of breath, choking, chest pain, numbness and fear of dying; the mixed somatic sub-type with symptoms of sweating, trembling, nausea, chills, hot flushes, and dizziness; and finally the cognitive sub-type with fear of going crazy, fear of losing control, and feeling of unreality (Depersonalization and derealization). We found that cardiopulmonary symptoms as dyspnoea, chest pain, and fear of dying respectively were the frequent symptoms in chest clinic attendees, while expectedly palpitation, fear of dying, chest pain, and dyspnoea respectively were the frequent symptoms in cardiac clinic attendees. We were expecting that somatic symptoms would be more frequent in the attendees of internal medicine clinic; yet surprisingly cardiopulmonary symptoms (Dyspnoea, palpitation, fear of dying, and chest pain, respectively) were again the most frequent presenting symptoms in internal medicine clinics followed by somatic symptoms as GIT symptoms. Our finding may be reflective of the effect of culturally influenced help-seeking behaviour on the phenomenology of panic disorder where cardiovascular symptoms are considered dangerous symptoms and need more attention and care. Whilst somatic symptoms are common and more culturally accepted, hence, may need less attention.

It is therefore important to consider the differential diagnosis of Panic Disorder especially when evaluating patients with cardio-pulmonary symptoms. It is not uncommon for people with panic disorder to present with recurrent cardio-pulmonary symptoms as chest pains,

dyspnoea, and palpitations as their main complaint, and perceive other panic symptoms as normal reactions to the possibly life threatening condition (Taylor, 2000). Research indicated high prevalence of panic disorder in patients presenting with cardiopulmonary symptoms. Huffman and Pollack, (2003) found that as many as 25% of patients with chest pain who come to hospital emergency departments have panic disorder. Han, et al. (2004) found that more than one third of patients with medically unexplained dyspnea have panic disorder. Moreover, patients with palpitations have high prevalence of panic attacks (Ehlers, et al. 2000; Mayou, et al. 2003), and Panic Disorder (Barsky, et al. 1996). In an evaluation of patients with palpitations referred for ambulatory EEG Barsky, et al. (1994) found 27.6% lifetime panic disorder.

Gastrointestinal symptoms are common in panic disorder. Hinton, et al. (2001) reported GIT symptoms in 16% of PD patients, which is near to our finding of 17.2%. Most of PD patients in our study reported symptoms of abdominal distress as fluttering of the abdomen, dragging of the stomach, or abdominal colic. Lydiard, (2005) reported that individuals with panic disorder had a high prevalence of functional gastrointestinal disorders; a group of disorders characterized by recurrent gastrointestinal distress for which no structural or biochemical cause can be discerned. Hence, proper identification and treatment of PD in these patients may prevent unnecessary, excessive and expensive investigations. Our finding of high statistical correlation between GIT symptoms and presenting to internal medicine clinic, highlights the need to increase the awareness of physicians of panic related GIT symptoms.

Besides its physical symptoms, panic disorder is frequently comorbid with other psychiatric conditions. Comorbid mood disorders occur commonly with panic disorder and result in greater severity, poorer quality of life, and greater impairment (Simon and Fischmann, 2005). Our study showed that, 85.5% of patients with panic disorder had clinically diagnosed comorbid depressive disorder. In Egyptian samples the PD comorbidity rate with depression varied considerably. Arafa, et al. (1987) reported a prevalence of 90%, while Darwish, (1992) and El-Mahdi, (2008) found lower prevalence rates of 22.2% and 23.1% respectively.

Substance misuse disorders commonly co-occur with panic disorder. Katerndahl and Realini, (1999) found that 39% of panic disorder patients had abused at least one substance, while Sbrana, et al. (2005) reported 4% substance use disorder, and 26% subthreshold use in those with panic disorder. In the current study 6.7% of our patients had a comorbid substance use. The relations between panic and substance use disorder remains complex. Panic disorder can be precipitated by the use of psychotropic drugs such as marijuana or

cocaine (Ballenger and Fyer, 1996). Substance abuse disorders are frequently supposed to be secondary to the panic disorder, and can be interpreted as self-medication (Bernstein, et al. 2006; Zvolensky, et al. 2006). Some authors, however, found that that abuse preceded panic attacks (Cox, et al. 1989; Katerndahl and Realini, 1999).

In our study we found that outpatient clinic attendees with medically unexplained symptoms tended to have moderate severity of symptoms that are usually of long duration. The majority of these subjects had moderate panic scores on SPRAS. This correlated positively with the severity of anxiety symptoms detected by HAM-A. The mean HAM-A score in our study was 25.4 ± 4.81 . This was slightly more than previously reported by Darwish, (1992) in an Egyptian sample of PD. The moderately severe anxiety symptoms may be reflective of the underlying degree of free floating and anticipatory anxiety states associated with PD. The presence of less severe symptoms may play an important role in the under-recognition of PD. Hence, it is important that symptoms, rather than severity should be the focus of clinicians and treatment interventions. The treatment of subthreshold presentations may substantially decrease morbidity in these patients and can be cost-effective in decreasing healthcare costs.

Moreover, the majority of cases had duration of illness more than 12 months, and despite our finding that duration showed high statistically significant correlation to severity, these individuals were still under-recognized even though there symptoms were severe. This reflects the need for better awareness and training for physicians to enable proper and early identification of Panic Disorder.

CONCLUSION

Panic disorder is prevalent in medical settings especially in the attendees of medical outpatients' clinics who display medically unexplained symptoms. These individuals may present with less severe panic symptoms, which can preclude their proper identification and early treatment and lead to chronicity. Individuals with unrecognized panic disorder may continue to unnecessary and excessively utilize healthcare resources which can be a substantial burden on healthcare budgets. Hence, early identification and treatment of patients with panic disorder can have a positive bearing on individual well being, quality of life, and healthcare economy.

Corresponding Author

Ahmed Okasha
Professor of Psychiatry and Past President of the World Psychiatric Association
Institute of Psychiatry, Faculty of Medicine, Ain Shams University, Cairo, Egypt
Email: aokasha@internetegypt.com

REFERENCES

- Affi, M. 2007.** Gender differences in mental health. Singapore Medical Journal 48(5):385-391.
- American Psychiatric Association. 1994.** Diagnostic and Statistical Manual of Mental Disorders DSM-IV.4th ed. American Psychiatric Association.
- Ballenger, J. C., and Fyer, A. J. 1996.** Panic disorder and agoraphobia. In DSM-IV sourcebook, edited by T. A. Widiger, A. J. Frances and H. A. et al Pincus. Washington, DC: American Psychiatric Association: 411-471.
- Barsky, A. J., Cleary, P. D., Sarnie, M. K., and Ruskin, J. N. 1994.** Panic disorder, palpitations and the awareness of cardiac activity. The Journal of Nervous and Mental Disease 182(2):63-71.
- Barsky, A. J., Delamater, B. A., and Orav, J. E. 1999.** Panic disorder patients and their medical care. Psychosomatics 40(1):50-56.
- Barsky, A. J., Delamater, B. A., Clancy, S. A., et al. 1996.** Somatized psychiatric disorder presenting as palpitations. Archives of Internal Medicine 156(10):1102-1108.
- Bernstein, A., Zvolensky, M. J., Sachs Ericsson, N., et al. 2006.** Associations between age of onset and lifetime history of panic attacks and alcohol use, abuse and dependence in a representative sample. Comprehensive Psychiatry 47(5):342-349.
- Birchall, H., Brandon, S., and Taub, N. 2000.** Panic in a general practice population: Prevalence, psychiatric comorbidity and associated disability. Social Psychiatry and Psychiatric Epidemiology 35(6):235-241.
- Broers, T., Hodgetts, G., Batic Mujanovic, O., et al. 2006.** Prevalence of mental and social disorders in adults attending primary care centers in Bosnia and Herzegovina. Croatian Medical Journal 47(3):478-484.
- Carr, R. E. 1999.** Panic disorder and asthma. The Journal of Asthma: Official Journal of the Association for the Care of Asthma 36(2): 143-152.
- Christensen, U., Schmidt, L., Kriegbaum, M., et al. 2006.** Coping with unemployment: Does educational attainment make any difference? Scandinavian Journal of Public Health 34(4):363-370.
- Cox, B. J., Norton, G. R., Dorward, J., and Fergusson, P. A. 1989.** The relationship between panic attacks and chemical dependencies. Addictive Behaviors 14(1):53-60.
- Culpepper, L. 2004.** Identifying and treating panic disorder in primary care. The Journal of Clinical Psychiatry 65 Suppl 5:19-23.
- Darwish, T. 1992.** The diagnostic validity of panic disorder, anxiety, depression, common or a separate entity. MD diss., Ain Shams University.
- El-Mahdi, M. A. 2008.** Clinical study on a sample of Egyptian panic patients attending psychiatry, chest and cardiac outpatient on El-Hoseen University Hospital. MD diss., Faculty of Medicine, Ain Shams University.
- Galaverni, E., Pozo Navarro, P., and Bellini, M. 2005.** Estudio sobre sintomas de panico en atencion primaria. [A survey of panic symptoms in a primary care setting]. Atencion Primaria / Sociedad Espanola De Medicina De Familia y Comunitaria 36(6):312-316.
- Goodwin, R. D., Faravelli, C., Rosi, S., et al. 2005.** The epidemiology of panic disorder and agoraphobia in Europe. European Neuropsychopharmacology: The Journal of the European College of Neuropsychopharmacology 15(4):435-443.
- Goodwin, R., Lipsitz, J. D., Chapman, T. F., et al. 2001.** Obsessive-compulsive disorder and separation anxiety co-morbidity in early onset panic disorder. Psychological Medicine 31(7):1307-1310.
- Grant, B. F., Hasin, D. S., Stinson, F. S., et al. 2006.** The epidemiology of DSM-IV panic disorder and agoraphobia in the United States: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. The Journal of Clinical Psychiatry 67(3):363-374.
- Hamilton, M. 1959.** The assessment of anxiety states by rating. British Journal of Medical Psychology 32(1):50-55.
- Han, J. N., Zhu, Y. J., Li, S. W., et al. 2004.** Medically unexplained dyspnea: Psychophysiological characteristics and role of breathing therapy. Chinese Medical Journal 117(1):6-13.
- Hinton, D., Chau, H., Nguyen, L., et al. 2001.** Panic disorder among Vietnamese refugees attending a psychiatric clinic: Prevalence and subtypes. General Hospital Psychiatry 23(6):337-344.
- Huffman, J. C., and Pollack, M. H. 2003.** Predicting panic disorder among patients with chest pain: An analysis of the literature. Psychosomatics 44(3):222-236.
- Joyce, P. R., Bushnell, J. A., Oakley Browne, M. A., et al. 1989.** The epidemiology of panic symptomatology and agoraphobic avoidance. Comprehensive Psychiatry 30(4):303-312.
- Katerndahl, D. A., and Realini, J. P. 1999.** Relationship between substance abuse and panic attacks. Addictive Behaviors 24(5): 731-736.
- Kelly, M. M., Forsyth, J. P., and Karekla, M. 2006.** Sex differences in response to a panicogenic challenge procedure: An experimental evaluation of panic vulnerability in a non-clinical sample. Behaviour Research and Therapy 44(10):1421-1430.
- King, M. K., Schmalting, K. B., Cowley, D. S., and Dunner, D. L. 1995.** Suicide attempt history in depressed patients with and without a history of panic attacks. Comprehensive Psychiatry 36(1):25-30.

- Lecrubier, Y. 1998.** The impact of comorbidity on the treatment of panic disorder. *The Journal of Clinical Psychiatry* 59 Suppl 8: 11-4 discussion:15-16.
- Lecrubier, Y., and Ustun, T. B. 1998.** Panic and depression: A worldwide primary care perspective. *International Clinical Psychopharmacology* 13 Suppl 4:S7-S11.
- Lee, S., Tsang, A., and Kwok, K. 2005.** A community-based telephone survey of panic disorder in Hong Kong. *Depression and Anxiety* 22(2):77-83.
- Leon, A. C., Olfson, M., and Portera, L. 1997.** Service utilization and expenditures for the treatment of panic disorder. *General Hospital Psychiatry* 19(2):82-88.
- Lydiard, R. B. 2005.** Increased prevalence of functional gastrointestinal disorders in panic disorder: Clinical and theoretical implications. *CNS Spectr.* 10(11):899-908.
- Okasha, A., Bishry, Z., Khalil, A. H., et al. 1994.** Panic disorder. An overlapping or independent entity? *The British Journal of Psychiatry; the Journal of Mental Science* 164(6):818-825.
- Olfson, M., Broadhead, W. E., Weissman, M. M., et al. 1996.** Subthreshold psychiatric symptoms in a primary care group practice. *Archives of General Psychiatry* 53(10):880-886.
- Riecher Rossler, A., Fatkenheuer, B., Loffler, W., et al. 1992.** Is age of onset in schizophrenia influenced by marital status? Some remarks on the difficulties and pitfalls in the systematic testing of a "simple" question. *Social Psychiatry and Psychiatric Epidemiology* 27(3):122-128.
- Rollman, B. L., Belnap, B. H., Mazumdar, S., et al. 2005.** A randomized trial to improve the quality of treatment for panic and generalized anxiety disorders in primary care. *Archives of General Psychiatry* 62(12):1332-1341.
- Roy Byrne, P., Russo, J., Dugdale, D. C., et al. 2002.** Undertreatment of panic disorder in primary care: Role of patient and physician characteristics. *The Journal of the American Board of Family Practice/ American Board of Family Practice* 15(6):443-450.
- Roy Byrne, P. P., Stein, M. B., Russo, J., et al. 1999.** Panic disorder in the primary care setting: Comorbidity, disability, service utilization and treatment. *The Journal of Clinical Psychiatry* 60(7):492-9; quiz 500.
- Roy Byrne, P. P., Wagner, A. W., and Schraufnagel, T. J. 2005.** Understanding and treating panic disorder in the primary care setting. *The Journal of Clinical Psychiatry* 66 Suppl 4:16-22.
- Rubin, H. C., Rapaport, M. H., Levine, B., et al. 2000.** Quality of well being in panic disorder: The assessment of psychiatric and general disability. *Journal of Affective Disorders* 57(1-3):217-221.
- Sansone, R. A., Sansone, L. A., and Righter, E. L. 1998.** Panic disorder: The ultimate anxiety. *Journal of Women's Health / The Official Publication of the Society for the Advancement of Women's Health Research* 7(8):983-989.
- Sbrana, A., Bizzarri, J. V., Rucci, P., et al. 2005.** The spectrum of substance use in mood and anxiety disorders. *Comprehensive Psychiatry* 46(1):6-13.
- Schmidt, L. J. 2002.** *Panic: Origins, insight and treatment.* Edited by B. Warner, L. Schmidt and L. J. Schmidt. North Atlantic Books.
- Segui, J., Salvador Carulla, L., Garcia, L., et al. 1998.** Subtipificacion de los trastornos de panico en funcion de sus sintomas. [Subtyping panic disorders according to their symptoms]. *Medicina Clinica* 110(14):524-528.
- Sheehan, D. V. 1983.** *The anxiety disease.* New York: Charles Scribner and Sons.
- Sheikh, J. I., Leskin, G. A., and Klein, D. F. 2002.** Gender differences in panic disorder: Findings from the National Comorbidity Survey. *The American Journal of Psychiatry* 159(1):55-58.
- Simon, N. M., and Fischmann, D. 2005.** The implications of medical and psychiatric comorbidity with panic disorder. *The Journal of Clinical Psychiatry* 66 Suppl 4:8-15.
- Taylor, S. 2000.** *Understanding and treating panic disorder: Cognitive-behavioral approaches.* New York: Wiley.
- Weissman, M. M., Bland, R. C., Canino, G. J., et al. 1997.** The cross-national epidemiology of panic disorder. *Archives of General Psychiatry* 54(4):305-309.
- Wittchen, H. U., and Essau, C. A. 1993.** Epidemiology of panic disorder: Progress and unresolved issues. *Journal of Psychiatric Research* 27 Suppl 1:47-68.
- Zaubler, T. S., and Katon, W. 1998.** Panic disorder in the general medical setting. *Journal of Psychosomatic Research* 44(1):25-42.
- Zvolensky, M. J., Bernstein, A., Marshall, E. C., and Feldner, M. T. 2006.** Panic attacks, panic disorder and agoraphobia: Associations with substance use, abuse and dependence. *Current Psychiatry Reports* 8(4):279-285.

الملخص العربي

معدل إنتشار اضطراب الهلع في المترددين على العيادات الطبية

احمد عكاشة^{1,3}، خديجة راغب²، حسين عطية²، رضا إسماعيل²، احمد المسيري¹، امنية العزازي²

¹مركز الطب النفسي قسم الامراض النفسية والعصبية كلية الطب جامعة عين شمس القاهرة

²قسم الامراض النفسية كلية الطب جامعة الازهر بنات القاهرة

³الرئيس السابق للجمعية العالمية للطب النفسي سويسرا

مقدمة:

تنطبق عليهم المواصفات التالية (العمر من 15 إلى 60 ليس لديهم أمراض عضوية %45.4 وكانت النسبة 1.7 من كل المترددين على العيادات. كانت النسبة لدى المجموعة الثانية (المجموعة الضابطة) 1.2 ممن تنطبق عليهم أيضا المواصفات التالية العمر من 15-60 ليس لديهم أمراض عضوية. بالنسبة للعمر فقد كان سن الـ 45 عاما هو المرحلة العمرية الأكثر انتشارا في هذه المجموعة. كانت إصابة الإناث باضطراب الهلع أكثر من الرجال وجد الاضطراب بنسبه أكثر في الأشخاص الغير عاملين والأقل تعليما و المتزوجين. ووجدنا انه زادت مدة الاضطراب عند معظم المرضى عن اثني عشر شهرا. واخيرا وجد أن حوالي %49 من مرضى الهلع عانوا من اضطراب نفسي مصاحب وكانت لاضطرابات الاكتئابيه هي أهم هذه الاضطرابات.

الخلاصة:

اضطراب الهلع واسع الانتشار في المترددين على العيادات الطبية المختلفة وهؤلاء المرضى يتعثر تشخيصهم بواسطة الاطباء غير النفسيين ويستنزفون الميزانيات الطبية بفحوصات عديدة يمكن تفاديها عن طريق تدريب الاطباء و توعية المرضى.

اضطراب الهلع هو أحد اضطرابات القلق ويعد من أهمها وأكثرها انتشارا، فهو خبرة فسيولوجيه ونفسيه تؤدي حين حدوثها إلى تفاعل بين وظائف الجسم الفسيولوجيه والنفسية.

عينة الدراسة وأدواتها: لقد تم اختيار العينة من المترددين على عيادات القلب والصدر والباطنة العامة بشرط ألا يكون المريض لديه أي تاريخ لمرض عضوي وكان عدد المرضى خمسمائة مريض من مستشفى الزهراء الجامعي، وتم اختبار عينه ضابطه من 500 شخص من الأفراد العاملين بإدارة المستشفى مماثلة للعيه المرضية في السن والجنس والحالة الاجتماعية وليس بها أي أمراض عضوية. وقد تم إجراء الاختبارات التالية عليهم بعد التأكد من أطباء عيادات الباطنة أنهم لا يعانون من أي مرض عضوي وهذه الاختبارات هي: مقابله إكلينيكيه نفسيه: شبه مقننه قائمه على التشخيص الاكلينيكي للمحك النفسي الرابع وذلك لتشخيص اضطراب الهلع. اختبار «هاملتون» لقياس درجة القلق. اختبار «شيهان» لقياس شدة اضطراب الهلع.

وكانت النتائج كآلاتي: كانت نسبه اضطراب الهلع عند المجموعة الأولى (أي المترددين على عيادات القلب والصدر والباطنة) ممن