The frequency of agoraphobia and the comorbidity of major depressive disorder in panic disorder

Received : 21/8/2011 Accepted: 21/1/2012

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Abstract

Background and objectives: Panic disorder (PD) is a common disabling psychiatric condition that has a considerable impact on the quality of life. This study was done to estimate the frequency of agoraphobia and the comorbidity of major depressive disorder (MDD) in PD, with related sex difference.

Methods: A cross sectional descriptive study, was done on patients who consulted a private psychiatric clinic for features of PD, in Erbil city from August 2009 to August 2010**.** A convenient sample of 118 patients, 73 females and 45 males, having PD with or without agoraphobia were taken after giving their informed verbal consent. All patients were checked for the presence of MDD. The diagnoses were done clinically, and then checked according to the diagnostic and statistical manual of mental disorders, 4th edition, text revision (DSM-IV-TR).

Results: Mean age of PD with or without agoraphobia was 31.1 years. Female to male ratio was 1.6/1. Mean age at onset was 26.3 years. Mean duration of illness was 4.4 years. Patients having PD without Agoraphobia were 81.4%, while having PD with agoraphobia were 18.6% in which the males (20%) affected more than females (17.8%). The comorbidity rate of MDD (mild to severe degree) in PD was 61% with higher males (68.9%) than females (57.5%).

Conclusion: The majority of patients with PD in our sample had a comorbid MDD. Early detection and management of PD is necessary to reduce complications and improve their quality of life.

Keywords: Panic disorder, agoraphobia, comorbidity, depression

Introduction

Panic disorder (PD) is a common disabling psychiatric illness that has a considerable impact on the quality of life. It impairs the social, family and working lives of sufferers at a time when they should make the greatest contribution to society. It leads to over-utilization of medical facilities in futile efforts to find a physical cause for their symptoms. Frequent comorbid psychiatric conditions, most notably depression and other anxiety disorders complicate the clinical presentation, exacerbating individual disability and increasing the economic burden to society. [1]PD has a life time prevalence of 1.5-4% of population, [2] but it is often undiagnosed and untreated.[3] The longer length of time from onset of panic to first treatment is associated with higher rates of comorbidity at first psychiatric treatment contact and less favorable treatment outcomes.[4]Panic attack is the hallmark of PD. It is a feeling of overwhelming fear that can be defined as a specific, discrete type of anxiety, characterized by an abrupt onset and rapid crescendo peak of prominent autonomic symptoms, often seeming to come 'out of the blue. [5] While to describe the state as PD, it must include panic attacks, anticipatory anxiety for at least one month about the possibility of having a panic attack, phobic symptoms and functional disability in daily life. [1, 6]Agoraphobia

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is strongly linked to PD. Agoraphobia is an avoidance behavioral response to panic attacks that attempts to reduce the frequency of attacks, where the patients may come to associate panic attacks with specific situations or settings, these situations or settings are then avoided. Common situations in which panic attacks occur are those where the patient feels crowded, confined, and without an easy exit, or being in novel situations away from sources of support such as a spouse. Although the goal of this avoidance behavior is to reduce the frequency of attacks, it may result in a restricted lifestyle and impairment in occupational and interpersonal functioning.[7] The term 'comorbidity', coined by Feinstein, is now widely used to refer to the greater than coincidental association of two conditions in the same individual.[8] Comorbidity between PD and depression is one of the most strongest psychiatric comorbidities,[9] and the single strongest anxiety-mood episode comorbidity in both treatment sample,[10] and general population sample.[11] Data from several epidemiologic studies show that the majority of individuals who experience a panic attack will also have an episode of major depression during their lifetime.[12,13] The likelihood of this co-occurrence is even stronger among those who meet the full criteria for PD.[14] A great number of studies indicate that this specific comorbidity when compared to the non comorbid cases, they determine: increased symptom severity, [15] an unfavorable outcome or a more chronic illness, [16] decreased professional and social functioning, [17] and a reduced therapeutic response and compliance.[18] The risk of suicidal behavior associated with comorbid panic and depression also far exceed those associated with either disorder alone.[19] In addition, numerous studies have shown that PD and depression are each associated with similar common risk factors for psychopathology, such as low socioeconomic status, childhood abuse, and psychiatric comorbidity, suggesting possible common environmental etiologic links. [20, 21] Moreover, there are data to suggest that treating panic attack associated with decreased likelihood of the onset of major depressive disorder (MDD) among adults,[22] providing additional evidence of a link. In particular, the first line recommended psychopharmacologic treatment by selective serotonin reuptake inhibitors for both panic and depression is the same, suggesting a common neurobiological mechanisms.[23, 24] Finally, cognitive behavioral therapy and other psychotherapeutic interventions have proven efficacy with both PD and MDD.[25-26]

Aims of the study:

1- To estimate the frequency of agoraphobia in PD and the related sex difference.

2- To estimate the comorbidity rate of MDD in PD and the related sex difference.

Methods

A cross sectional descriptive study was collected from patients who consulted a private psychiatric clinic for features of PD, in Erbil city from August 2009 to August 2010**.** A convenient sample of 118 patients, 73 females and 45 males, having PD with or without agoraphobia were enrolled in this study after taking their informed verbal consent. All patients were checked for the presence of MDD. The diagnoses of PD without agoraphobia, PD with agoraphobia and MDD were done clinically by a specialist psychiatrist according to the diagnostic criteria for PD without agoraphobia, PD with agoraphobia and MDD depending on the diagnostic and statistical manual of mental disorders, 4th edition, text revision (DSM-IV-TR). [6, 27] The patients with MDD were classified to Mild, Moderate, Severe without psychotic features and Severe with psychotic features MDD according to the DSM-IV-TR .[27] Patients with primary depression, normal bereavement, history of manic or hypomanic episodes, history of schizophrenia and the related disorders, alcohol and drug dependence, and any physical illness were excluded from the study. All informations including data concerning age, sex, marital status, occupation, age of onset and duration of illness of

PD were taken through a direct interview. Statistical analyses in form of range, mean and standard deviation were applied by using Microsoft excel program.

Results

The Range of age of PD with or without agoraphobia was 34 years (17-51), with a Mean of 31.1 years ± SD 7.6. The female to male ratio was 1.6 / 1. Married patients were 78%. Regarding occupation; 84.4% of the males were employed, while 74% of the females were housewives. The Range of age of onset of PD with or without agoraphobia was 31years (16 - 47), with a Mean of 26.3 years ± SD 6.3, while the Range of duration of illness was 7.3 years (0.2 - 7.5), with a Mean of 4.4 years ± SD 2.1.

Patients having PD without Agoraphobia were 81.4%, while having PD with agoraphobia were 18.6%. The men (20%) were more likely than women (17.8%) to have PD with agoraphobia Table (1). The comorbidity rate of MDD in PD with or without agoraphobia was 61%; Mild MDD was 21.2%, Moderate MDD was 33.9% and Severe without psychotic features MDD was 5.9%. comorbidity was higher in males (68.9%) than females (57.5%), as shown in Table (2).

Table 1: Distribution of PD with or without Agoraphobia according to age group and sex.

Age group (years)	PD without Agoraphobia Male No. (%)	Female No. (%)	PD with Agoraphobia Male No. (%)	Female No. (%)	Total PD Male No. (%)	Female No. (%)
15-24	11(24.4)	17(23.3)	2(4.4)	4(5.5)	13(28.9)	21(28.8)
25-34	17(37.8)	29(39.7)	6(13.3)	8(11)	23(51.1)	37(50.7)
35-44	7(15.6)	12(16.4)	1(2.2)	1(1.4)	8(17.8)	13(17.8)
45-54	1(2.2)	2(2.7)	0(0.0)	0(0.0)	1(2.2)	2(2.7)
Total	36(80)	60(82.2)	9(20)	13(17.8)	45(100)	73(100)

Table 2: Distribution of MDD in PD according to sex.

Sex	Mild MDD No. (%)	Moderate MDD No. (%)	Severe MDD without psychotic features No. (%)	Severe MDD with psychotic features No. (%)	Total MDD in PD No. (%)
Male	11(24.4)	17(37.8)	3(6.7)	0(0.0)	31(68.9)
Female	14(19.2)	23(31.5)	4(5.5)	0(0.0)	42(57.5)
Total	25(21.2)	40(33.9)	7(5.9)	0(0.0)	72(61.0)

Table 3: Distribution of PD according to age of onset and marital status.

Age of onset (years)	No. (%)	Marital status	No. (%)
15-24	40(33.9)	Single	22 (18.6)
25-34	65(55.1)	Married	92 (78)
35-44	12(10.2)	Widowed	3 (2.5)
45-54	1(0.8)	divorced	1 (0.8)
Total	118(100)	Total	118(100)

Discussion

The mean age of patients with PD with or without agoraphobia in this study was 31.1 years, which is similar to Battaglia et al study (31.9 years).[28] and relatively close to Fleet et al study (36.5 years).[29] The patients age were mostly between 15 to 44 years. Only three cases were from the 45-54 years age group and no cases were found above that range. These findings are similar to Yates study in 2009 [7] and to Andrade et al study, [30] and this may reflect a tendency for PD to abate over time, and may be an effect of increased mortality in PD with age. The female to male ratio was 1.6 / 1, and this is concordant to Fleet et al study (1.7 / 1) [29] and to Felicia et al study (1.99 / 1). [31] Most of the patients were married (78%) which is distant from Andrade et al study (41.7), [30] but close to Felicia et al study (72.2%).[31]. The mean age of onset of PD in this study was 26.3 years ± SD 6.3, which is relatively close to Battaglia et al study (22.7 years).[28] The mean duration of illness at interview time was 4.4 years ± SD 2.1, while in Battaglia et al study it was 9.2 years[28] and in Felicia et al study it was 9.6 years [31], where the natural history of PD is consistent with that of a chronic illness.[7] Rate of PD with agoraphobia in our study was 18.6%, which is lower than what was shown by Yates study who reported that one-third to one-half of patients with PD also met the criteria for agoraphobia. [7] This lower rate of PD with agoraphobia in our study may be related to the stronger social network and support in our society than in the western countries, which may have a positive impact against the development of agoraphobia. In this study women were less likely than men to have PD with agoraphobia (17.8% versus 20%) , this result disagrees with Yonkers et al study who found that women were more likely to have PD with agoraphobia (85% versus 75%).[32] This difference may be related to that the females in our study were mostly housewives (74%) who are mostly homebound hence, they are less likely to develop anxiety and panic attack outside the home environment. In addition, Turgeon et al study showed lower agoraphobic avoidance behavior in men of western countries to be associated with their alcohol use,[33] which is used less by men in our society.In this study the comorbidity rate of MDD in PD with or without agoraphobia was 61%, in the form of Mild (21.2%), Moderate (33.9%) or Severe without psychotic features MDD (5.9%), while no cases were found having Severe with psychotic features MDD . This comorbidity rate (61%) is concordant with Felicia et al study in 2003 (38.29%) [31], and Kessler et al study national comorbidity survey in 1998 (43.4%) [14], with Rief et al study in 2004 (47.4%), [34] and with Miriam et al study, that this comorbidity may reach up to 65%.[35] In our study the comorbidity rate was relatively high, patients in our society as opposed to western countries, usually consult the psychiatrists at later stage of the illness after consulting many physicians and doing

many investigations searching for an organic cause for their symptoms, and this may lead to the development of more comorbidity and complications. Comorbidity rate was higher in males (68.9%) than females (57.5%), which was concordant with Goodwin et al study in 2004 who showed that the risk was about 2-2.5 more in males than females. [36]

Conclusion

The majority of patients with PD in our sample had a comorbid MDD. Therefore, early detection and management of PD is required to reduce the complications and improve patient's quality of life.

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